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*Via Electronic and US Mail*

May 19, 2015

Joseph A. Gowers  
Remedial Project Manager  
Emergency and Remedial Response Division  
USEPA Region II  
290 Broadway, 19<sup>th</sup> Floor  
New York, New York 10007-1866

Re: Ringwood Mines/Landfill Superfund Site  
April 2015 Supplemental Groundwater and Surface Water Sampling

Dear Mr. Gowers:

On April 20-22 and 24, 2015, Cornerstone Engineering Group, LLC, on behalf of Ford Motor Company (Ford), completed a supplemental sampling event for groundwater and surface water to aid in the assessment of a benzene concentration reported in Well RW-6 from the March 2015 sampling event in wells down-gradient of the Peters Mine Pit (PMP). Consistent with previous sampling events at the Site, samples collected by Cornerstone on behalf of Ford were submitted under chain of custody to Accutest Laboratories in Dayton, NJ.

On behalf of the Borough of Ringwood (Borough), Excel Environmental Resources, Inc. (Excel) collected split samples at all groundwater and surface water locations. Samples collected by Excel on behalf of the Borough were submitted under chain of custody to Test America in Edison, NJ.

Groundwater samples were collected using the low-flow sampling methodology. Field sampling data sheets are attached for reference. Samples were analyzed for the Target Compound List (TCL) volatile organic compounds (VOCs) plus the next 15 tentatively identified compounds (TICs). Groundwater samples were also analyzed for the major cations and anions.

The results of this supplemental sampling event may be summarized as follows:

- Concentrations of VOCs in groundwater, including benzene, were at low levels consistent with historical concentrations in both sets of samples with a strong correlation between the split sample data sets. VOC TICs were also reported at certain well locations at similar historical concentrations.

Mr. Joseph A. Gowers

May 19, 2015

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- Piper and Stiff diagrams (attached) show that the groundwater is of similar geochemistry throughout the sampling area. The Piper and Stiff diagrams were plotted using half the detection limit, when a constituent was shown as non-detect. Also, filtered results were used as these are considered more representative of groundwater quality, although there were nominal differences between filtered and unfiltered samples. The Piper and Stiff diagrams are similar to the plots prepared from the Remedial Investigation data also indicating consistency of the geochemistry over time.
- There were no VOCs reported in surface water samples collected from the PMP Pond or within the adjacent Park Brook and trace VOCs reported in the SR-3 Seep sample consistent with historical concentrations.

This supplemental sampling event included the following:

- Groundwater sampling from PMP Area monitoring wells RW-6, RW-6A, RW-7, OB-11R, OB-20A, OB-20B, OB-21, OB-27, and SC-01.
- Groundwater sampling from the 50', 180', and 230' depth intervals in the PMP Air Shaft.
- Surface water sampling at the PMP Pond, SR-3 Seep, and Park Brook locations PAB-00, PAB-01, and PAB-01A.
- Quality controls samples including a field blank, a blind duplicate (collected at well SC-01), and five trip blanks.

The sampling locations are shown on the attached figure excerpted from Attachment 1 of the *Remedial Investigation Report for the Peters Mine Pit Area*, prepared by Arcadis, July 2012.

A total of six summary tables are attached: (1) a summary of the data set from Cornerstone's April sampling, (2) a table summarizing surface water results from Excel's April split sampling, (3) three tables summarizing the groundwater analytical results from Excel's April split sampling, and (4) an update of Table 13 from the *Draft Site-Related Groundwater RI Report, prepared by Arcadis, dated January 2015* for the on-going groundwater RI work which provides comparative historical data. Laboratory reports showing the analytical results and chain of custody are also attached for reference. The full laboratory reports for Accutest and Test America will be provided under separate cover on CD. Data validation of the Accutest results was performed by Cadena, and the data validation reports are attached for reference. Data validation of the Test America results was conducted by Excel.

The next supplemental sampling event is scheduled for June 1-3, 2015. The wells planned to be sampled for this next event include RW-6, RW-6A, OB-11R, OB-20A, OB-20B, OB-27, and SC-01. In addition, samples will be collected from the PMP Air Shaft at the 50', 180', and 230' depth intervals and at surface water locations PMP Pond, SR-3 Seep, and Park Brook locations PAB-00, PAB-01, and PAB-01. The planned chemical analysis for all samples is VOCs plus the next 15 TICs.

Mr. Joseph A. Gowers

May 19, 2015

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Please contact us if you have questions or comments on the enclosed submittal.

Sincerely,

CORNERSTONE ENGINEERING GROUP, LLC



Gary J. DiPippo, Professional Engineer.

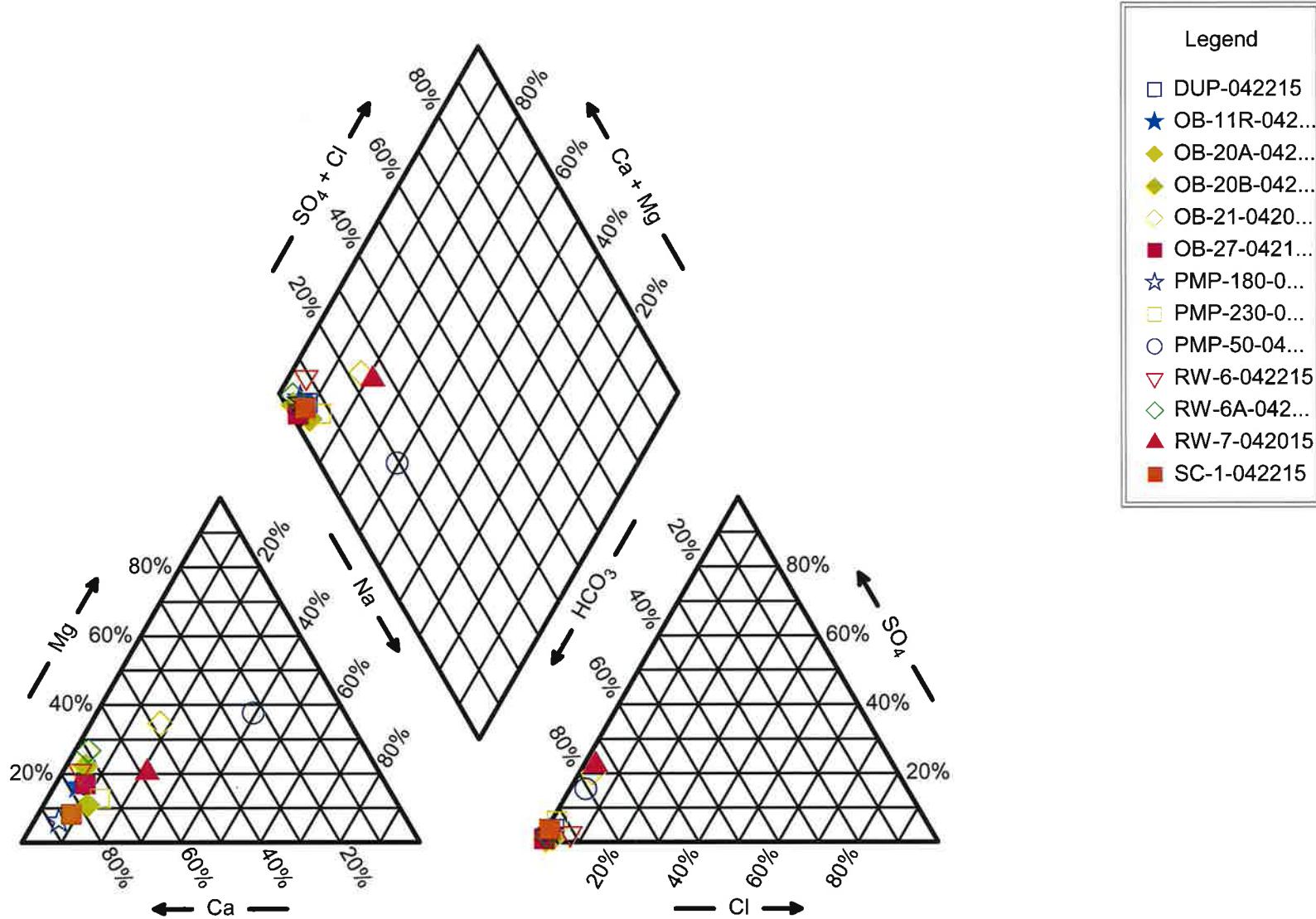
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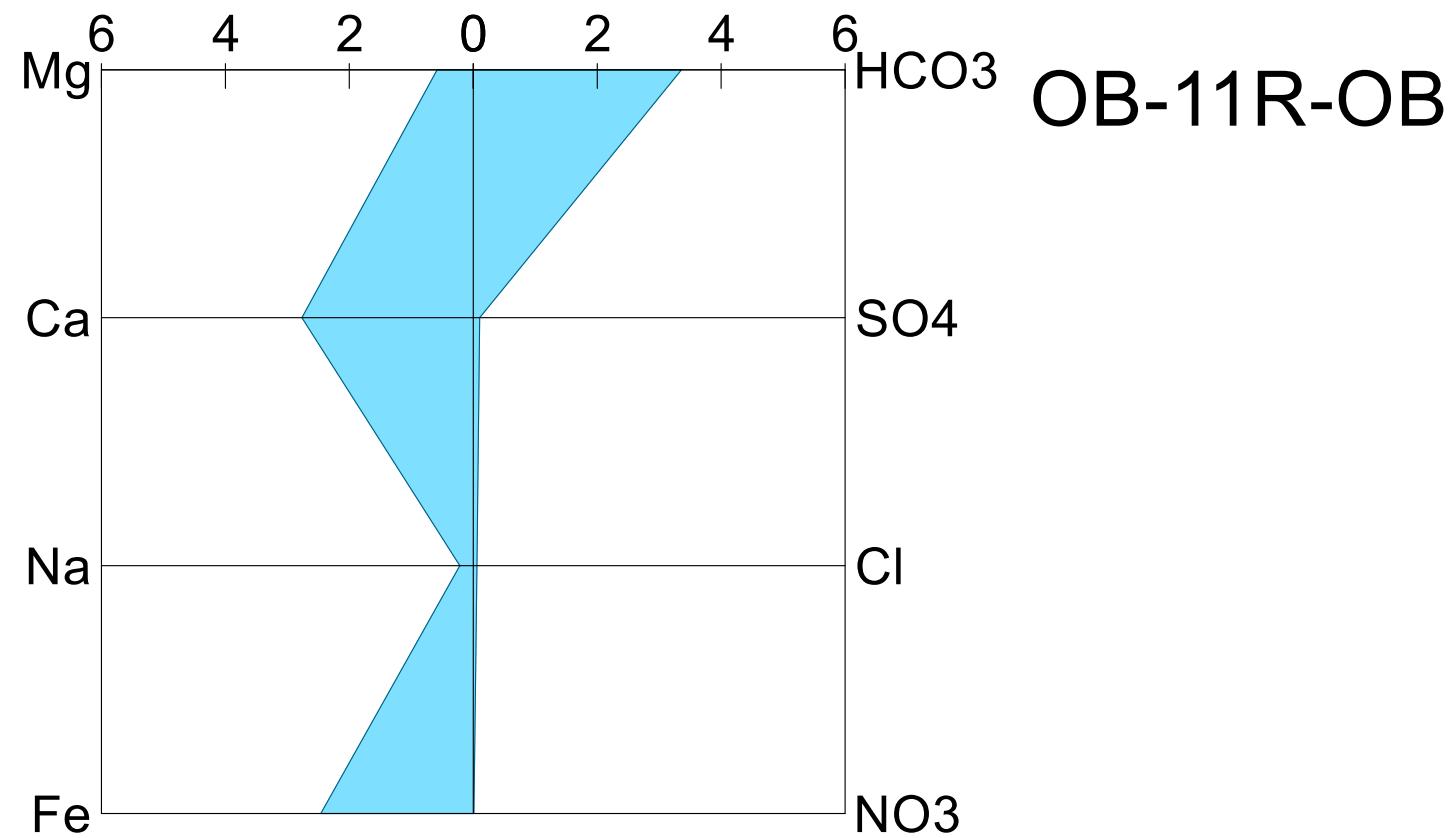
Region Vice President

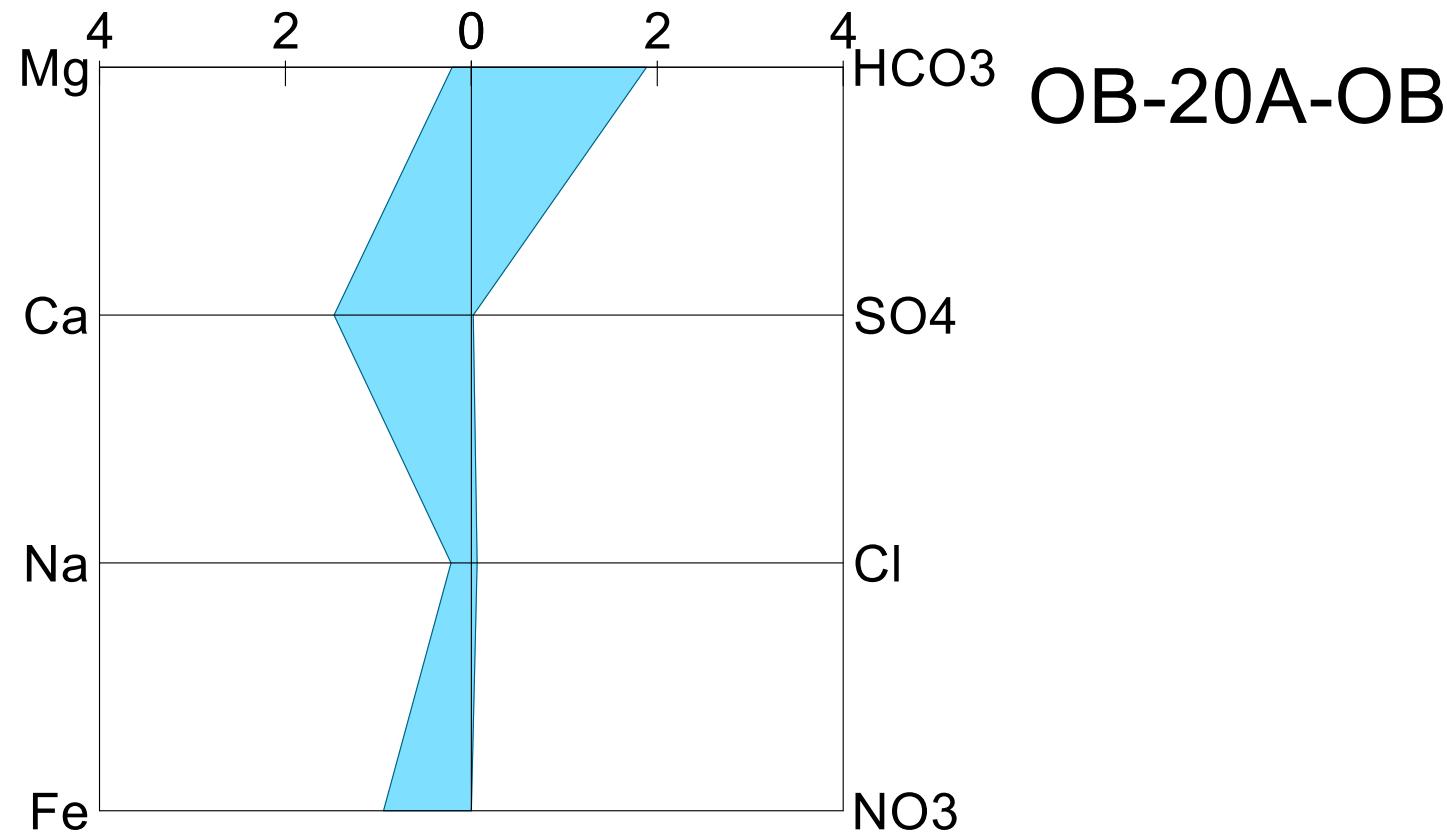
Enclosure

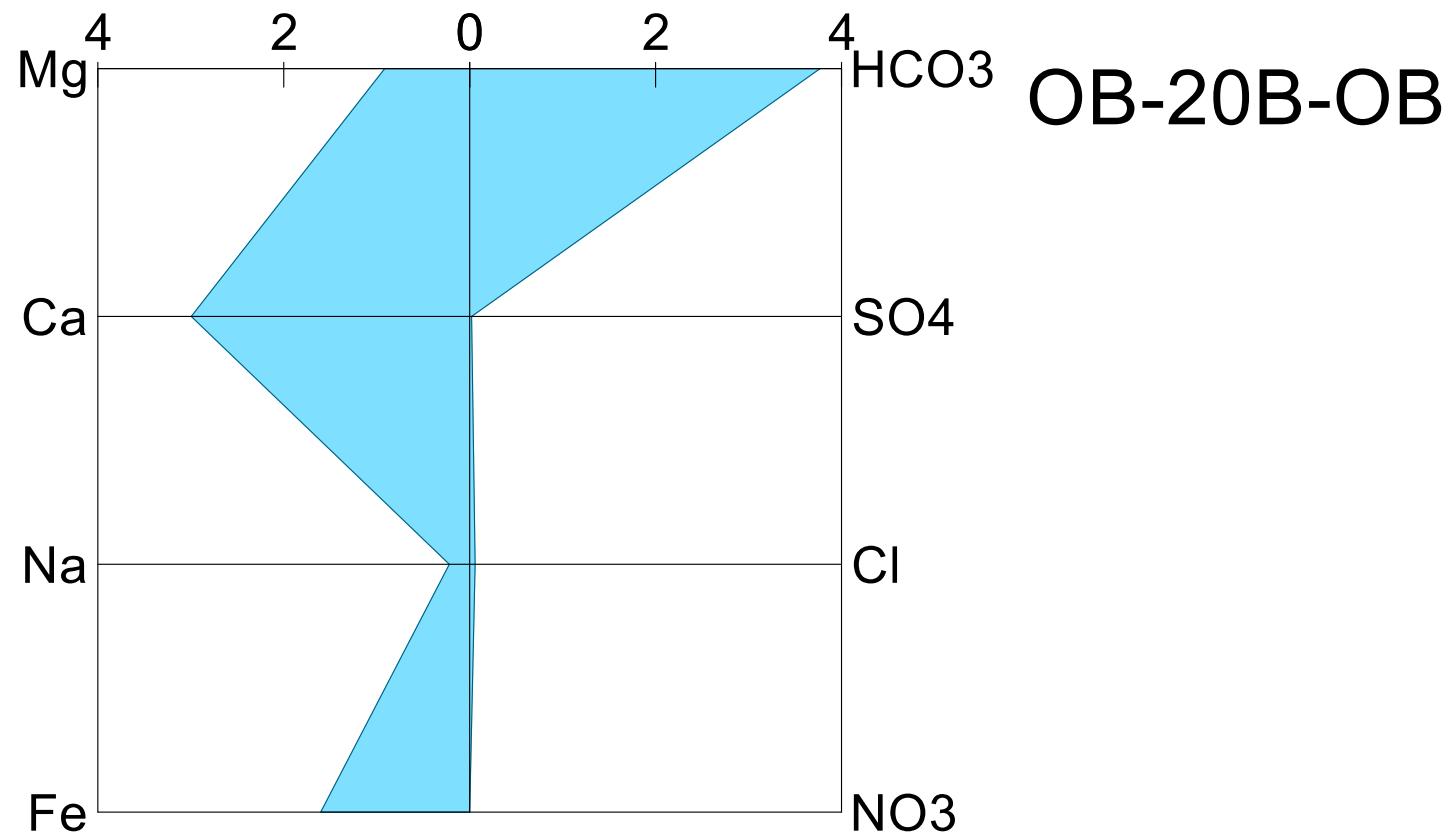
cc:	B. Bussa, Ford	L. Dodge, Excel
	T. Green, Ford OGC.	R. Harwood, Excel
	J. Lagrotteria, LeClairRyan	W. Monahan, Sedita, Campisano & Campisano
	D. Laguzza, LeClairRyan	C. Coslett, de maximis
	K. Petrone, NJDEP	

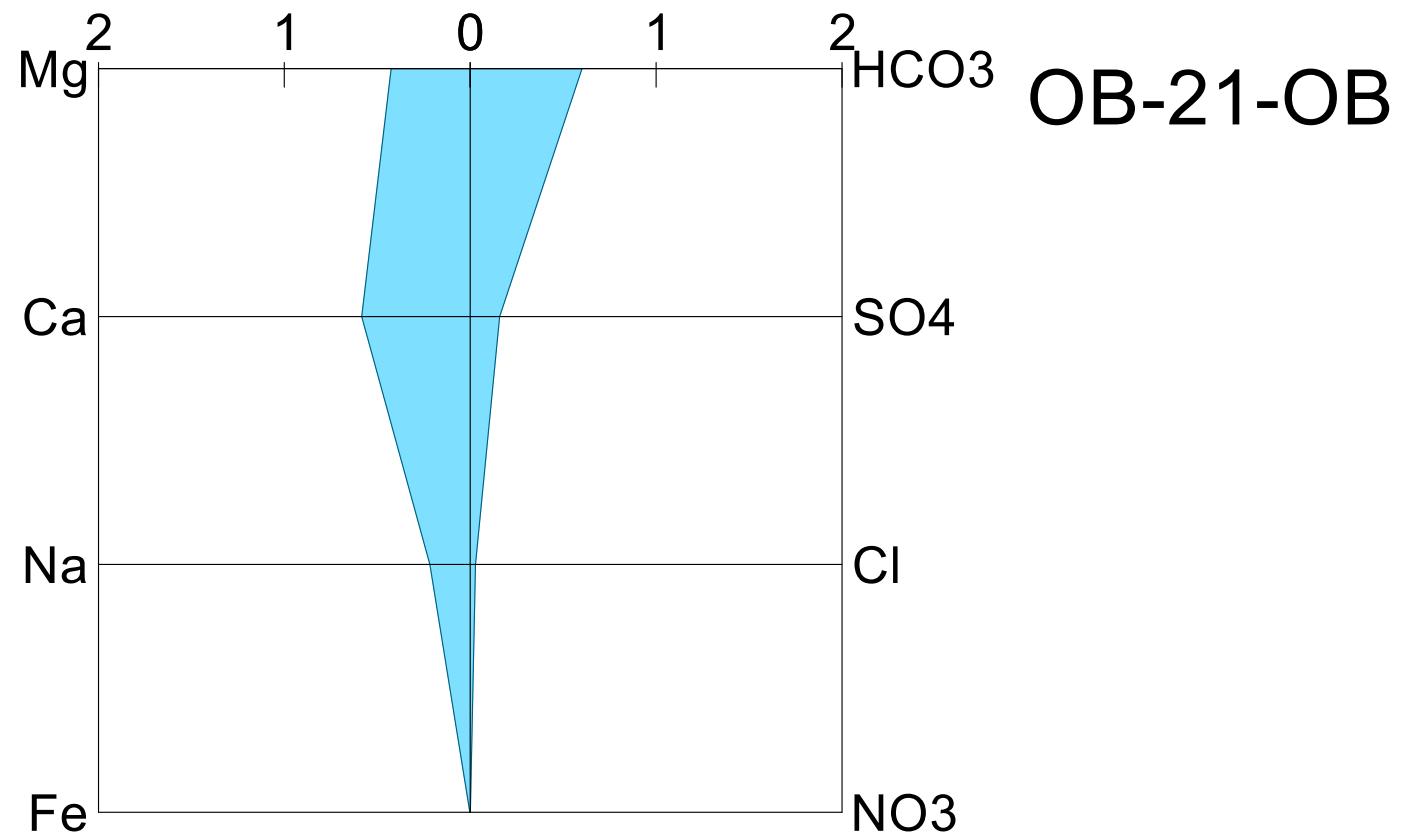
## Piper Diagram Ringwood 4/2015 Data 1/2D

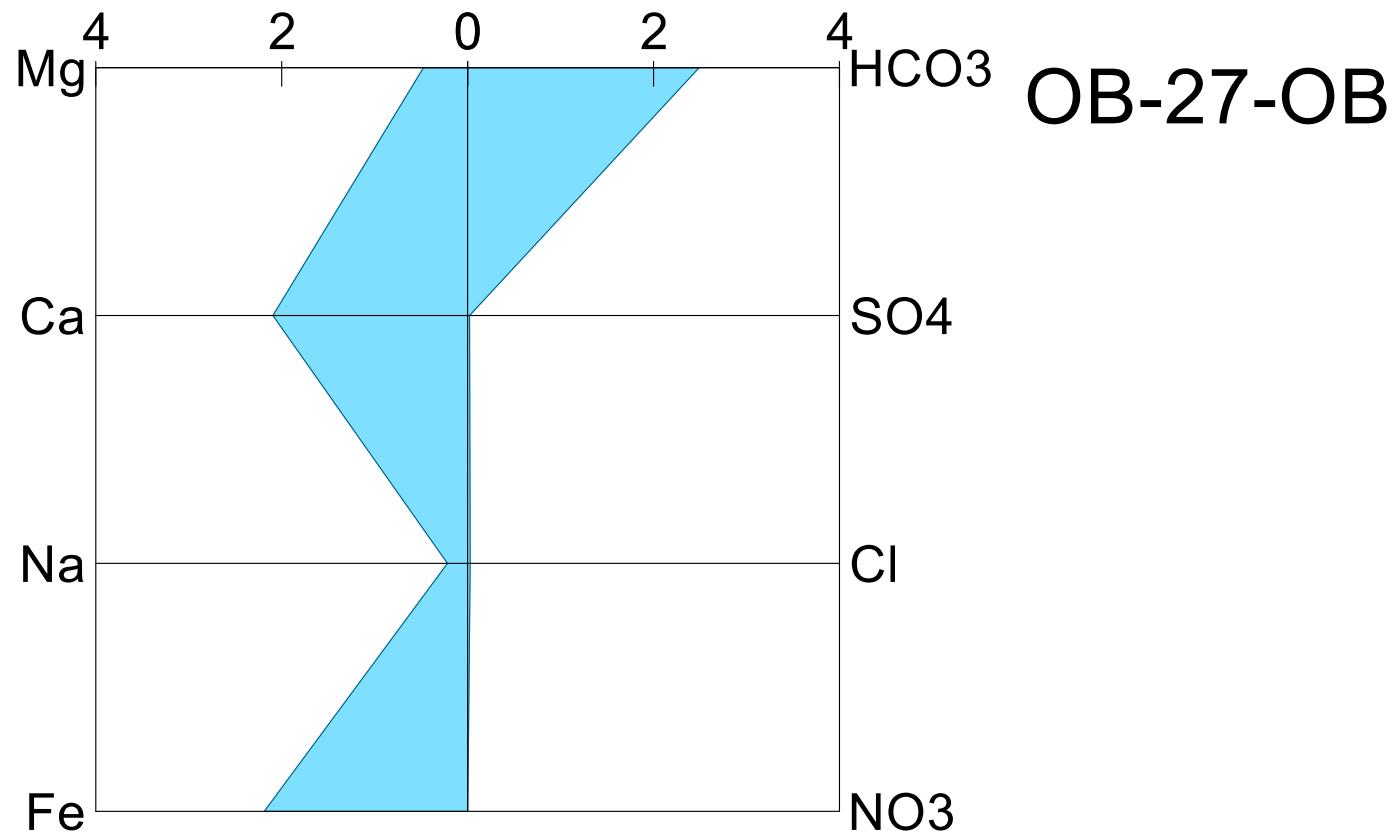


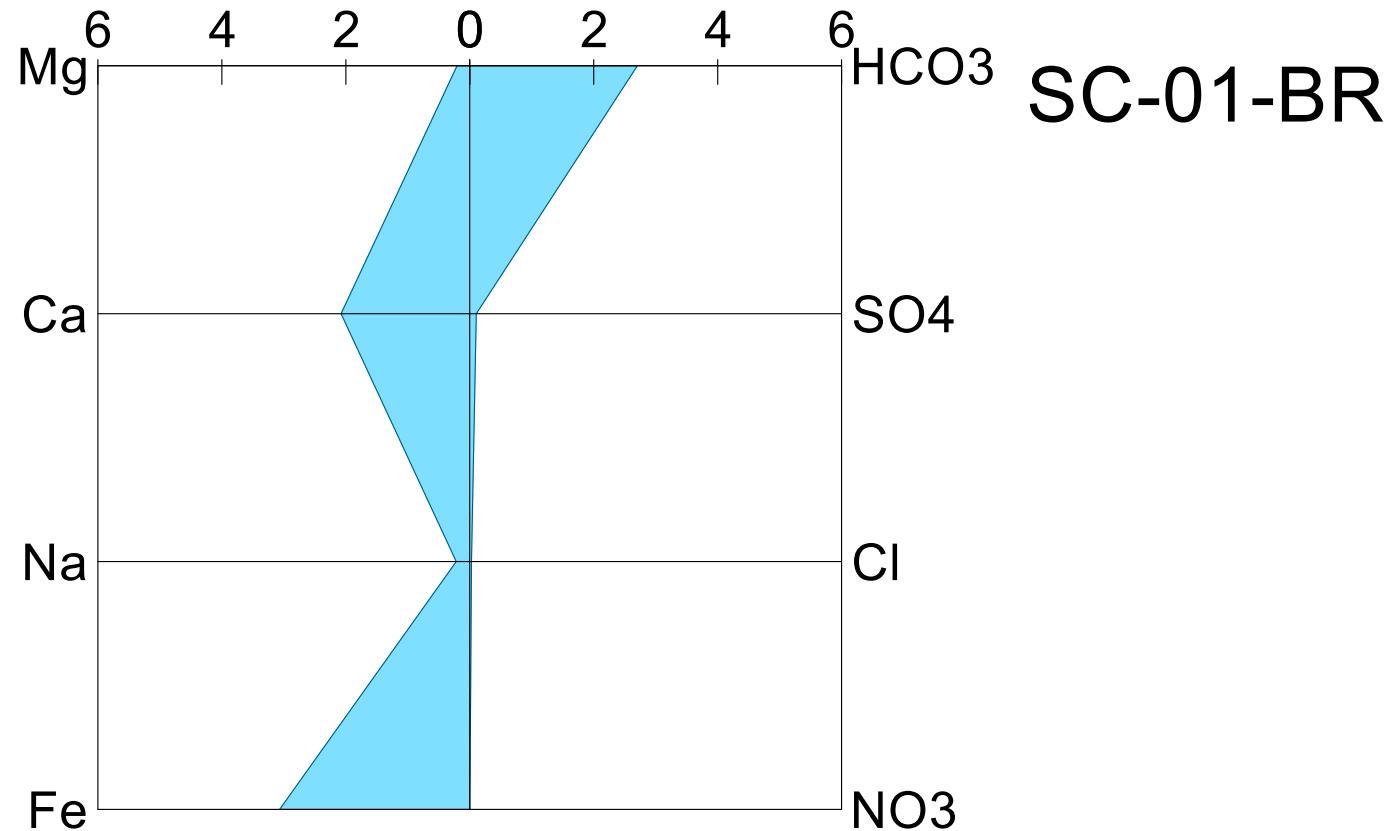


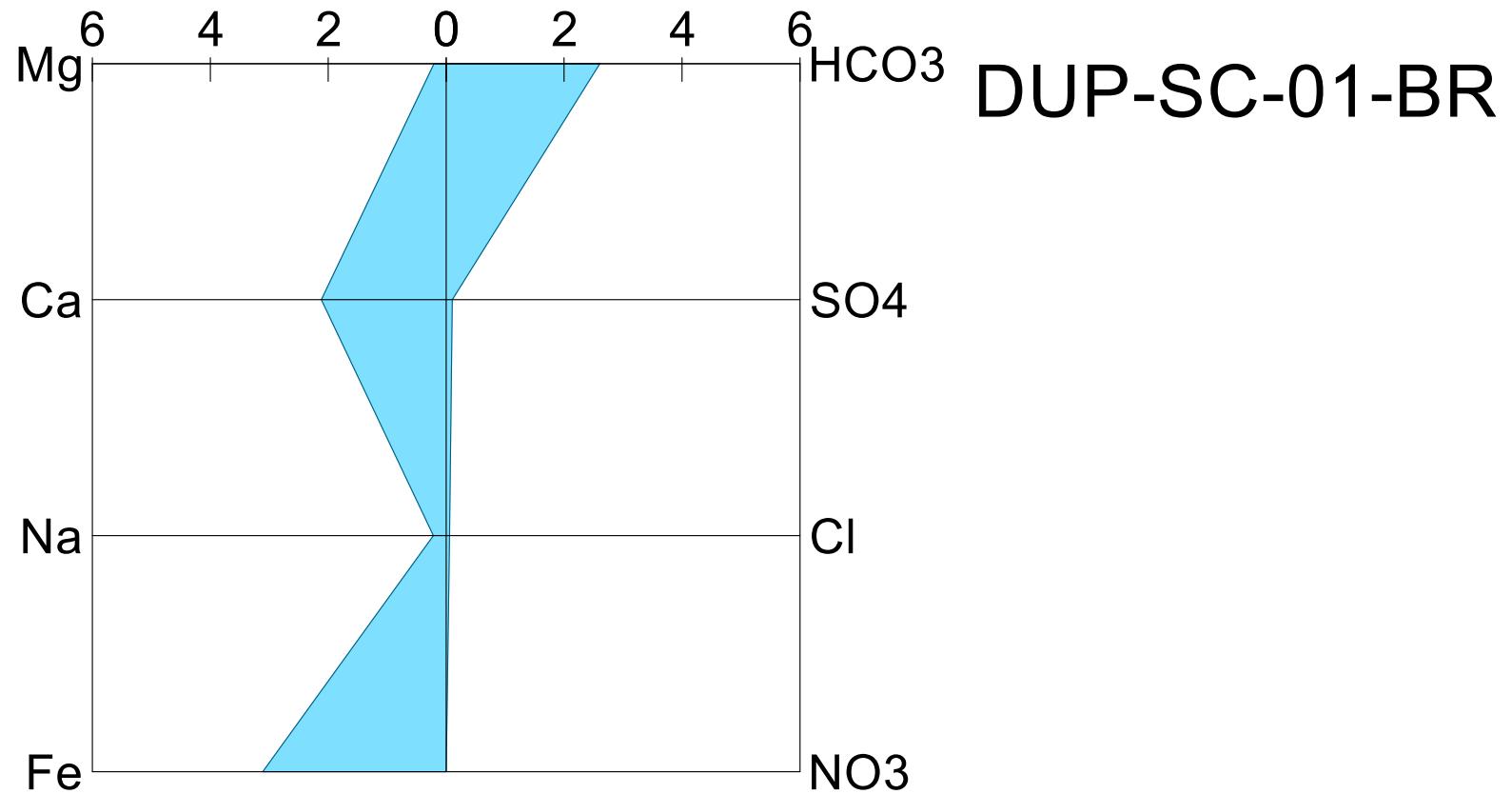


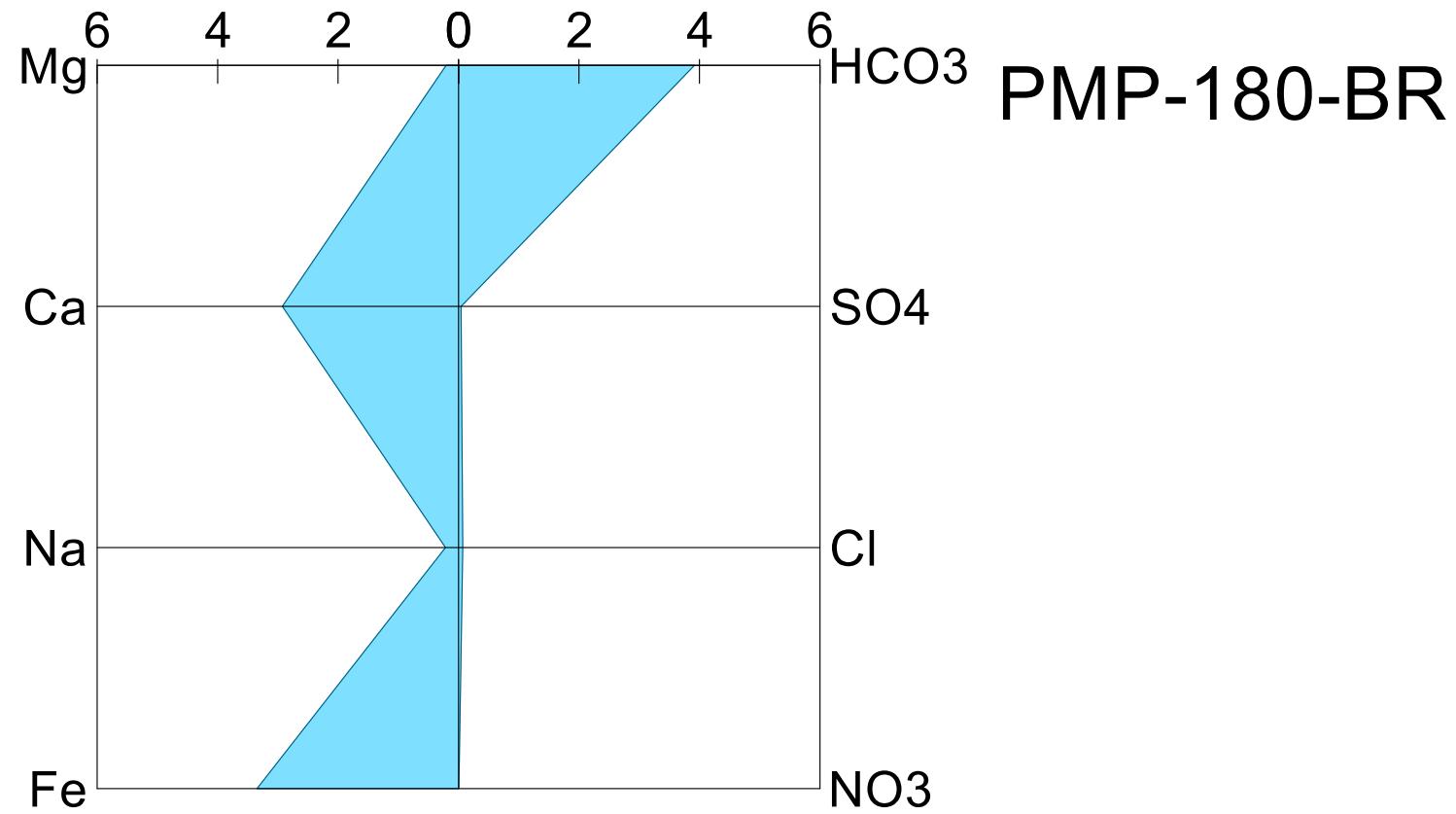


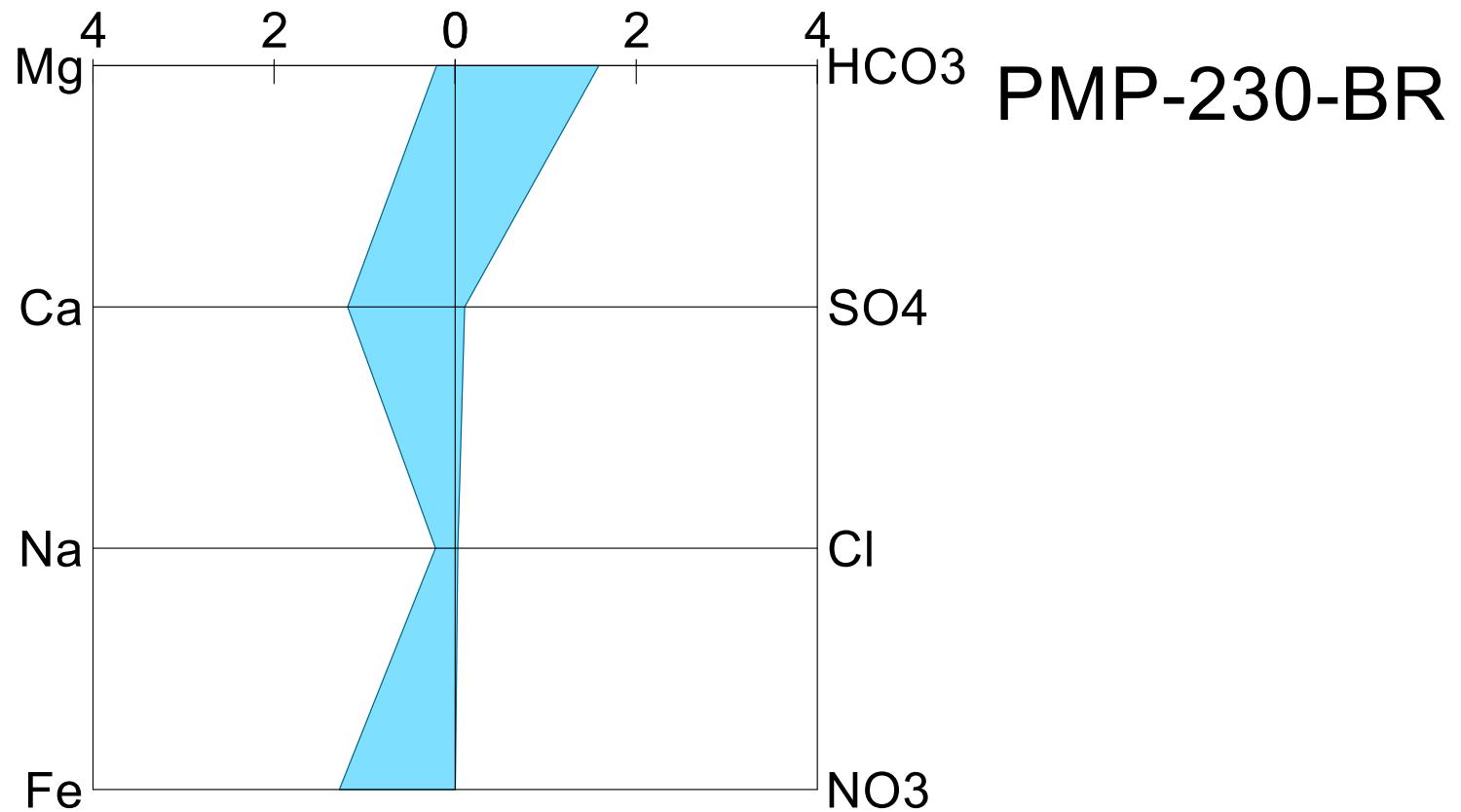


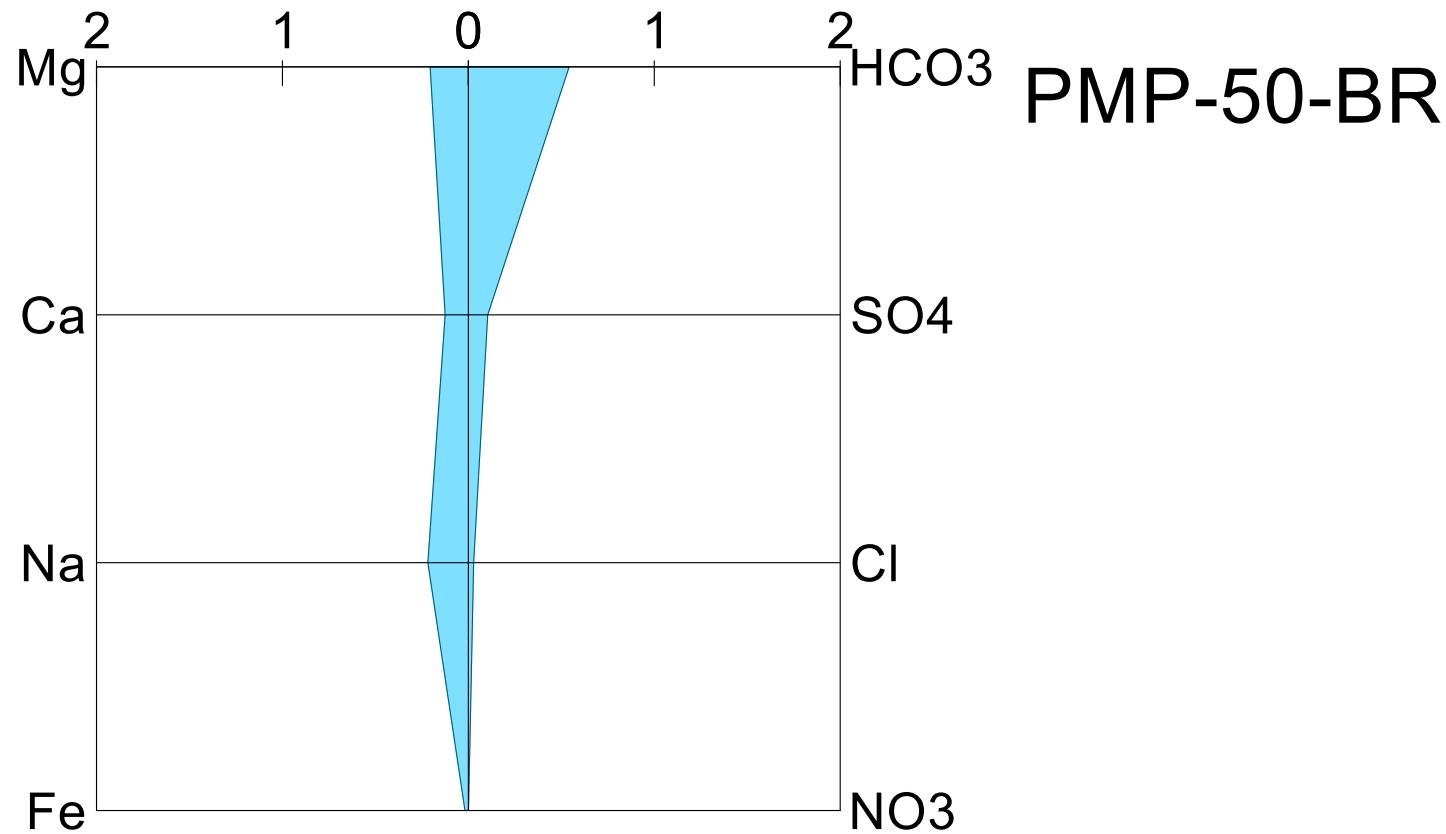


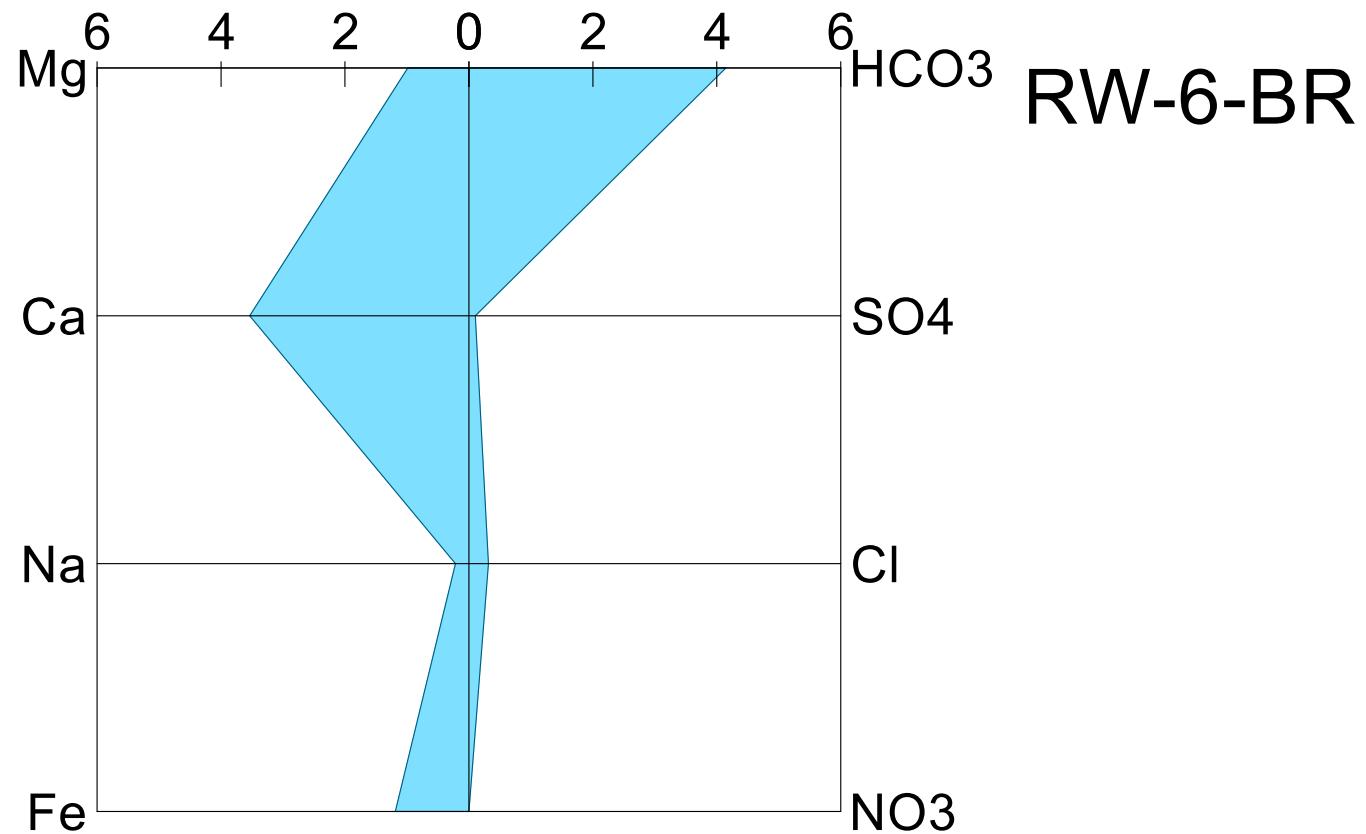


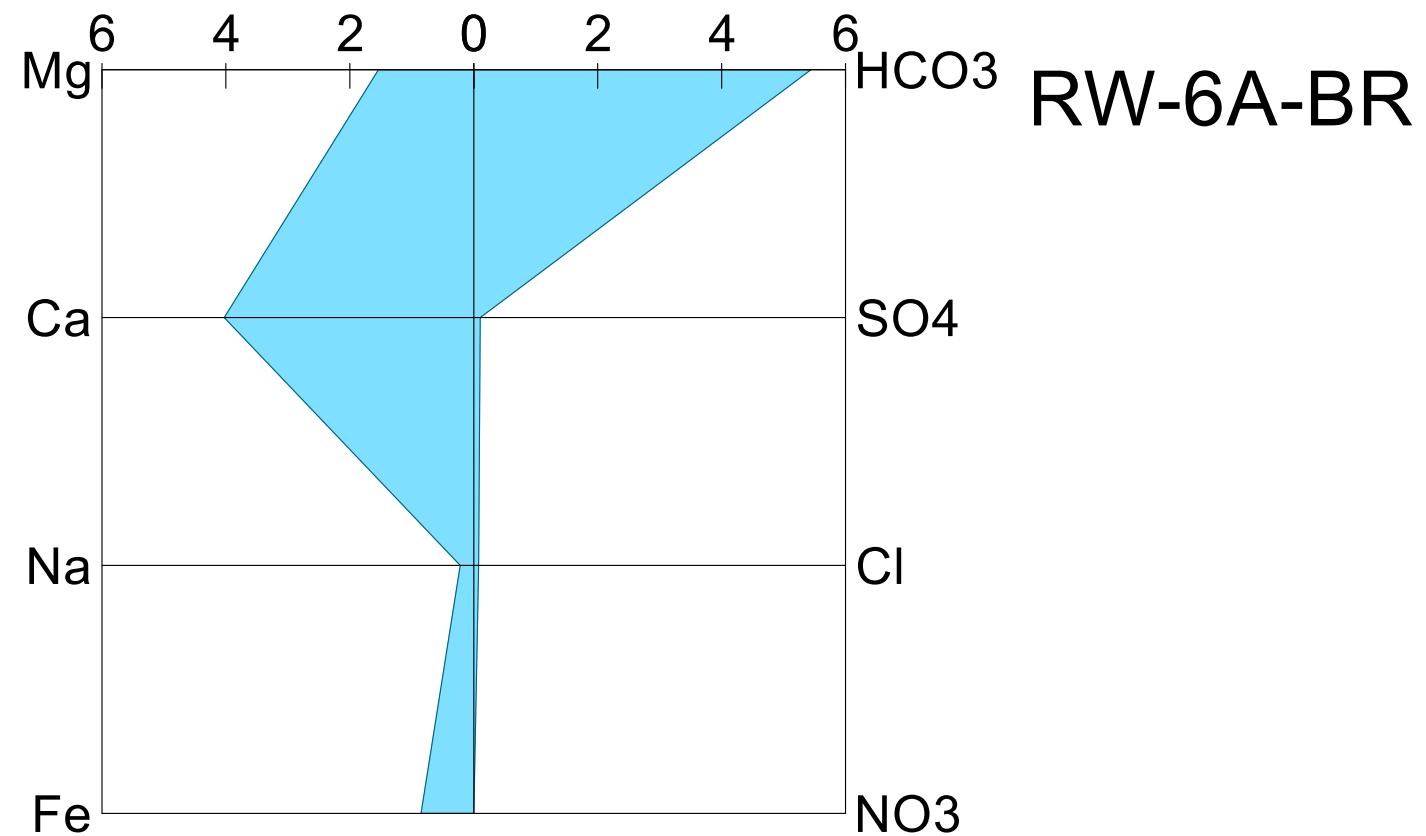


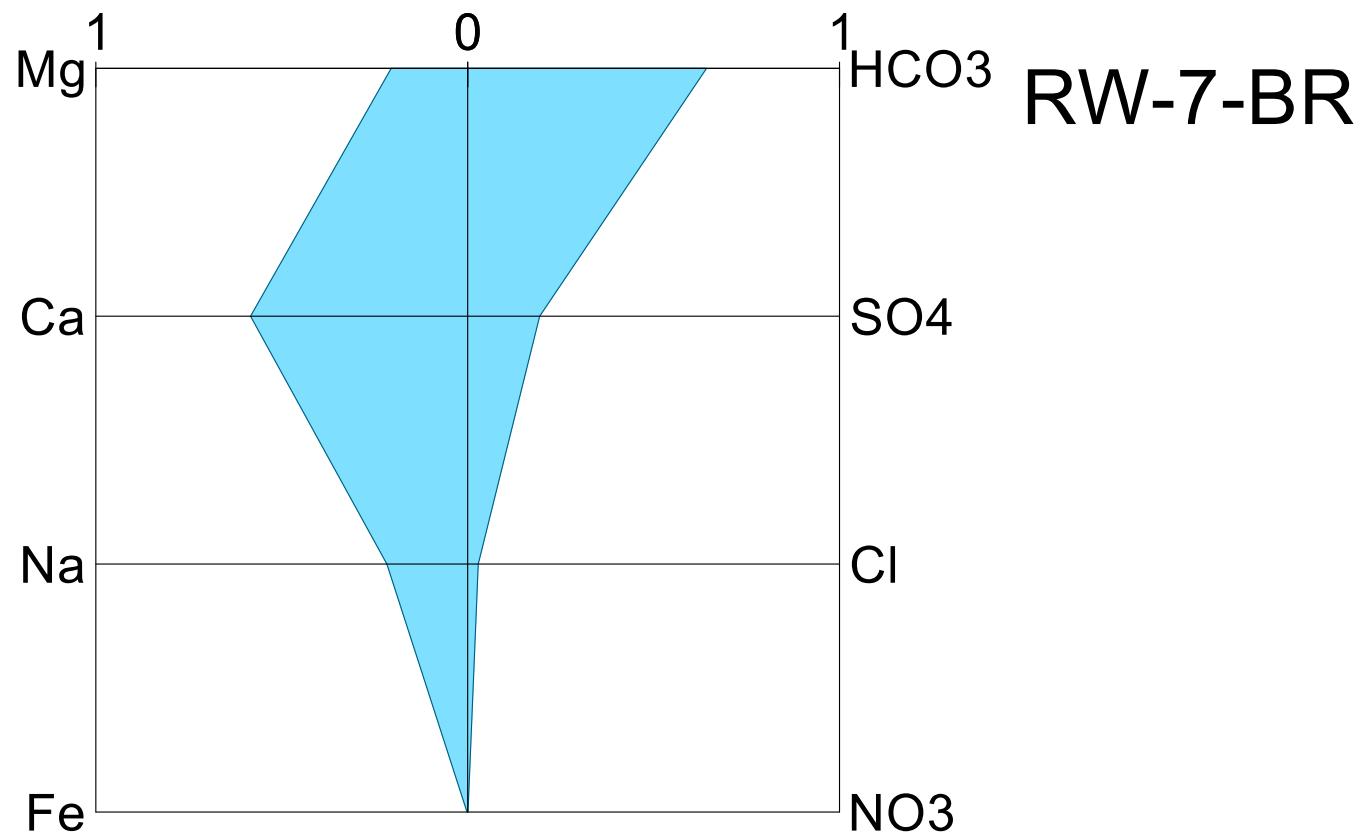


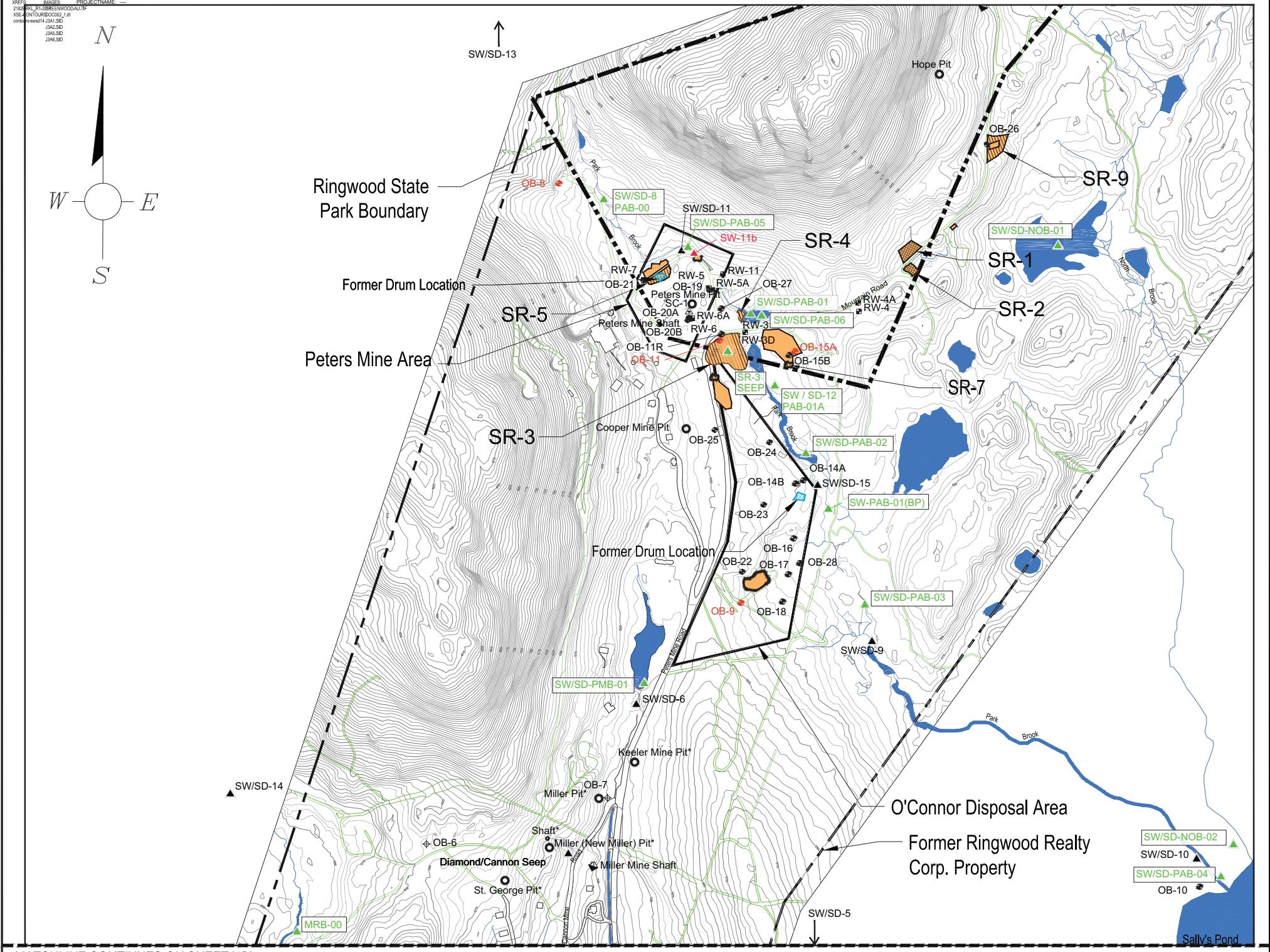












MATCHLINE CONTINUES ON SHEET '1B'



#### LEGEND

- Cannon ● ABANDONED MINE PIT
- Cannon Mine Shaft □ ABANDONED MINE SHAFT ENTRANCE
- \* APPROXIMATE LOCATION OF PIT
- RW-4 ○ MONITORING WELL
- OB-8 ○ MONITORING WELL
- SW/SD-2 ▲ SURFACE WATER AND SEDIMENT – SAMPLE LOCATION
- SW/SD-MRB-01 ▲ SURFACE WATER AND SEDIMENT – SAMPLE LOCATION FROM MINE BROOK
- SW/SD-PMB-01 ▲ SURFACE WATER AND SEDIMENT – SAMPLE LOCATION FROM PETERS MINE BROOK
- SW/SD-NOB-01 ▲ SURFACE WATER AND SEDIMENT – SAMPLE LOCATION FROM NORTH BROOK
- SW/SD-PAB-01 ▲ SURFACE WATER AND SEDIMENT – SAMPLE LOCATION FROM PARK BROOK
- SW-PAB-01(BP) ▲ PROPOSED SURFACE WATER – SAMPLE LOCATION FROM BEAVER POND
- SW-11b ▲ PROPOSED SURFACE WATER – SAMPLE LOCATION NEAR FORMER SAMPLING LOCATION SW/SD-11
- ◆ BEDROCK WELL
- DEEP BEDROCK WELL
- ▲ DIRECTIONAL WELL
- UNCONSOLIDATED WELL
- MONITORING WELL DAMAGED OR NOT AVAILABLE FOR SAMPLING
- CURRENT PAINT SLUDGE REMOVAL AREA (SR-3 THRU SR-9)
- 2004–2005 PAINT SLUDGE REMOVAL AREA COMPLETED TO DATE (SR-1 & SR-2)
- PRE-2004 PAINT SLUDGE REMOVAL AREA
- SUBSURFACE DRUM OR DRUM REMNANTS

RINGWOOD MINE/SOLID WASTE SITE  
RINGWOOD, NEW JERSEY  
PETERS MINE PIT AREA INVESTIGATION

#### SUMMARY OF SURFACE WATER SAMPLE LOCATIONS

ARCADIS

FIGURE -

GRAPHIC SCALE  
(IN FEET)  
1 inch = 200 feet

**Accutest New Jersey**

Job Numbers:	JB92815-JB93282
Account:	Cornerstone Environmental Group, LLC
Project:	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ
Project Number:	140802

Client Sample ID:		DUP-042215	DUP-042215	FB042015	FB042015	OB-11R-042115	OB-11R-042115	OB-20A-042115	OB-20A-042115	OB-20B-042115	OB-20B-042115	OB-21-042015
Lab Sample ID:		JB93030-3	JB93030-3F	JB92815-4	JB92815-4F	JB92926-1	JB92926-1F	JB92906-1	JB92906-1F	JB92906-3	JB92906-3F	JB92815-2
Date Sampled:		4/22/2015	4/22/2015	4/20/2015	4/20/2015	4/21/2015	4/21/2015	4/21/2015	4/21/2015	4/21/2015	4/21/2015	4/20/2015
Matrix:	CAS#	Ground Water	Groundwater Filtered	Field Blank Water	Field Blank Filtered	Ground Water	Groundwater Filtered	Ground Water	Groundwater Filtered	Ground Water	Groundwater Filtered	Ground Water

GC/MS Volatiles (SW846 8260C)

**Accutest New Jersey**

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**Account:** Cornerstone Environmental Group, LLC  
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Account:	Cornerstone Environmental Group, LLC
Project:	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ
Project Number:	140802

Client Sample ID:			DUP-042215	DUP-042215	FB042015	FB042015	OB-11R-042115	OB-11R-042115	OB-20A-042115	OB-20A-042115	OB-20B-042115	OB-20B-042115	OB-21-042015
Lab Sample ID:			JB93030-3	JB93030-3F	JB92815-4	JB92815-4F	JB92926-1	JB92926-1F	JB92906-1	JB92906-1F	JB92906-3	JB92906-3F	JB92815-2
Date Sampled:			4/22/2015	4/22/2015	4/20/2015	4/20/2015	4/21/2015	4/21/2015	4/21/2015	4/21/2015	4/21/2015	4/21/2015	4/20/2015
Matrix:	CAS#		Ground Water	Groundwater Filtered	Field Blank Water	Field Blank Filtered	Ground Water	Groundwater Filtered	Ground Water	Groundwater Filtered	Ground Water	Groundwater Filtered	Ground Water
Toluene	108-88-3	ug/l	0.44 J	-	0.16 U	-	0.16 U	-	0.16 U	-	0.16 U	-	0.16 U
1,2,4-Trichlorobenzene	120-82-1	ug/l	0.21 U	-	0.21 U	-	0.21 U	-	0.21 U	-	0.21 U	-	0.21 U
1,1,1-Trichloroethane	71-55-6	ug/l	0.25 U	-	0.25 U	-	0.25 U	-	0.25 U	-	0.25 U	-	0.25 U
1,1,2-Trichloroethane	79-00-5	ug/l	0.21 U	-	0.21 U	-	0.21 U	-	0.21 U	-	0.21 U	-	0.21 U
Trichloroethene	79-01-6	ug/l	0.22 U	-	0.22 U	-	0.22 U	-	0.22 U	-	0.22 U	-	0.22 U
Trichlorofluoromethane	75-69-4	ug/l	0.43 U	-	0.43 U	-	0.43 U	-	0.43 U	-	0.43 U	-	0.43 U
Vinyl chloride	75-01-4	ug/l	0.15 U	-	0.15 U	-	0.15 U	-	0.15 U	-	0.15 U	-	0.15 U
Xylene (total)	1330-20-7	ug/l	73.5	-	0.17 U	-	0.17 U	-	0.17 U	-	0.17 U	-	0.17 U

### GC/MS Volatile TIC

Total TIC, Volatile		ug/l	30.4 J	-	0	-	37.1 J	-	0	-	16.6 J	-	0
Total Alkanes		ug/l	0	-	0	-	0	-	0	-	0	-	0

### Metals Analysis

Calcium	7440-70-2	ug/l	41400	42400	5000 U	5000 U	56300	55400	29900	29600	61700	60000	11400
Iron	7439-89-6	ug/l	84400	87000	100 U	100 U	70000	68800	26800	26400	46700	44800	1740
Magnesium	7439-95-4	ug/l	5000 U	5000 U	5000 U	5000 U	7150	7100	5000 U	5000 U	11500	11100	5250
Sodium	7440-23-5	ug/l	10000 U										

### General Chemistry

Alkalinity, Bicarbonate		mg/l	159	-	5.0 U	-	205	-	118	-	230	-	36.7
Alkalinity, Total as CaCO3		mg/l	159	-	5.0 U	-	205	-	118	-	230	-	36.8

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Lab Sample ID:		JB93030-3	JB93030-3F	JB92815-4	JB92815-4F	JB92926-1	JB92926-1F	JB92906-1	JB92906-1F	JB92906-3	JB92906-3F	JB92815-2	
Date Sampled:		4/22/2015	4/22/2015	4/20/2015	4/20/2015	4/21/2015	4/21/2015	4/21/2015	4/21/2015	4/21/2015	4/21/2015	4/20/2015	
Matrix:	CAS#	Ground Water	Groundwater Filtered	Field Blank Water	Field Blank Filtered	Ground Water	Groundwater Filtered	Ground Water	Groundwater Filtered	Ground Water	Groundwater Filtered	Ground Water	
Chloride	16887-00-6	mg/l	2	-	2.0 U <sup>a</sup>	-	2.1	-	2.2 <sup>a</sup>	-	2.1 <sup>a</sup>	-	2.0 U <sup>a</sup>
Nitrogen, Nitrate	14797-55-8	mg/l	0.11 U <sup>b</sup>	-	0.11 U <sup>b</sup>	-	0.11 U <sup>b</sup>	-	0.11 U <sup>b</sup>	-	0.11 U <sup>b</sup>	-	0.11 U <sup>b</sup>
Nitrogen, Nitrate + Nitrite		mg/l	0.10 U	-	0.10 U	-	0.10 U	-	0.10 U	-	0.10 U	-	0.1
Nitrogen, Nitrite	14797-65-0	mg/l	0.010 U	-	0.010 U	-	0.010 U	-	0.010 U	-	0.010 U	-	0.010 U
Solids, Total Dissolved		mg/l	103	-	10 U	-	116	-	144	-	333	-	40
Sulfate	14808-79-8	mg/l	10 U	-	2.0 U <sup>a</sup>	-	10 U	-	2.0 U <sup>a</sup>	-	2.0 U <sup>a</sup>	-	7.6 <sup>a</sup>

**Footnotes:**

<sup>a</sup> Analysis performed at Accutest Laboratories, Orlando FL.

<sup>b</sup> Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

## Accutest New Jersey

Job Numbers: JB92815-JB9321  
 Account: Cornerstone En  
 Project: E203361 Ford R  
 Project Number: 140802

Client Sample ID:			OB-21-042015	OB-27-042115	OB-27-042115	PMP-180-042415	PMP-180-042415	PMP-230-042415	PMP-230-042415	PMP-50-042215	PMP-50-042215	PMP-POND-042215
Lab Sample ID:			JB92815-2F	JB92906-4	JB92906-4F	JB93282-1	JB93282-1F	JB93282-2	JB93282-2F	JB93030-9	JB93030-9F	JB93030-4
Date Sampled:			4/20/2015	4/21/2015	4/21/2015	4/24/2015	4/24/2015	4/24/2015	4/24/2015	4/22/2015	4/22/2015	4/22/2015
Matrix:	CAS#	Groundwater Filtered	Ground Water	Groundwater Filtered	Ground Water	Groundwater Filtered	Ground Water	Groundwater Filtered	Ground Water	Groundwater Filtered	Surface Water	

### GC/MS Volatiles (SW846 8260C)

Acetone	67-64-1	ug/l	-	3.3 U								
Benzene	71-43-2	ug/l	-	3.1	-	2.3	-	7.8	-	0.24 U	-	0.24 U
Bromodichloromethane	75-27-4	ug/l	-	0.23 U								
Bromoform	75-25-2	ug/l	-	0.23 U								
Bromomethane	74-83-9	ug/l	-	0.42 U								
2-Butanone (MEK)	78-93-3	ug/l	-	5.6 U								
Carbon disulfide	75-15-0	ug/l	-	0.25 U								
Carbon tetrachloride	56-23-5	ug/l	-	0.22 U								
Chlorobenzene	108-90-7	ug/l	-	0.19 U	-	0.49 J	-	1.4	-	0.19 U	-	0.19 U
Chloroethane	75-00-3	ug/l	-	87.2	-	7.9	-	29.1	-	0.34 U	-	0.34 U
Chloroform	67-66-3	ug/l	-	0.19 U								
Chloromethane	74-87-3	ug/l	-	0.41 U								
Cyclohexane	110-82-7	ug/l	-	1.8 J	-	0.42 J	-	1.3 J	-	0.28 U	-	0.28 U
1,2-Dibromo-3-chloropropane	96-12-8	ug/l	-	0.99 U								
Dibromochloromethane	124-48-1	ug/l	-	0.15 U								
1,2-Dibromoethane	106-93-4	ug/l	-	0.23 U								
1,2-Dichlorobenzene	95-50-1	ug/l	-	0.19 U								
1,3-Dichlorobenzene	541-73-1	ug/l	-	0.23 U								
1,4-Dichlorobenzene	106-46-7	ug/l	-	0.27 U	-	0.27 U	-	0.51 J	-	0.27 U	-	0.27 U

## Accutest New Jersey

Job Numbers:	JB92815-JB9321
Account:	Cornerstone En
Project:	E203361 Ford R
Project Number:	140802

Client Sample ID:		OB-21-042015	OB-27-042115	OB-27-042115	PMP-180-042415	PMP-180-042415	PMP-230-042415	PMP-230-042415	PMP-50-042215	PMP-50-042215	PMP-POND-042215	
Lab Sample ID:		JB92815-2F	JB92906-4	JB92906-4F	JB93282-1	JB93282-1F	JB93282-2	JB93282-2F	JB93030-9	JB93030-9F	JB93030-4	
Date Sampled:		4/20/2015	4/21/2015	4/21/2015	4/24/2015	4/24/2015	4/24/2015	4/24/2015	4/22/2015	4/22/2015	4/22/2015	
Matrix:	CAS#	Groundwater Filtered	Ground Water	Groundwater Filtered	Ground Water	Groundwater Filtered	Ground Water	Groundwater Filtered	Ground Water	Groundwater Filtered	Surface Water	
Dichlorodifluoromethane	75-71-8	ug/l	-	0.90 U	-	0.90 U	-	0.90 U	-	0.90 U	-	0.90 U
1,1-Dichloroethane	75-34-3	ug/l	-	0.17 U	-	0.17 U	-	0.75 J	-	0.17 U	-	0.17 U
1,2-Dichloroethane	107-06-2	ug/l	-	0.18 U	-	0.18 U	-	0.18 U	-	0.18 U	-	0.18 U
1,1-Dichloroethene	75-35-4	ug/l	-	0.51 U	-	0.51 U	-	0.51 U	-	0.51 U	-	0.51 U
cis-1,2-Dichloroethene	156-59-2	ug/l	-	0.27 U	-	0.27 U	-	0.61 J	-	0.27 U	-	0.27 U
trans-1,2-Dichloroethene	156-60-5	ug/l	-	0.65 U	-	0.65 U	-	0.65 U	-	0.65 U	-	0.65 U
1,2-Dichloropropane	78-87-5	ug/l	-	0.39 U	-	0.39 U	-	0.39 U	-	0.39 U	-	0.39 U
cis-1,3-Dichloropropene	10061-01-5	ug/l	-	0.21 U	-	0.21 U	-	0.21 U	-	0.21 U	-	0.21 U
trans-1,3-Dichloropropene	10061-02-6	ug/l	-	0.19 U	-	0.19 U	-	0.19 U	-	0.19 U	-	0.19 U
Ethylbenzene	100-41-4	ug/l	-	0.27 U	-	0.27 U	-	0.27 U	-	0.27 U	-	0.27 U
Freon 113	76-13-1	ug/l	-	0.52 U	-	0.52 U	-	0.52 U	-	0.52 U	-	0.52 U
2-Hexanone	591-78-6	ug/l	-	1.7 U	-	1.7 U	-	1.7 U	-	1.7 U	-	1.7 U
Isopropylbenzene	98-82-8	ug/l	-	3.4	-	0.64 J	-	1.8	-	0.23 U	-	0.23 U
Methyl Acetate	79-20-9	ug/l	-	1.9 U	-	1.9 U	-	1.9 U	-	1.9 U	-	1.9 U
Methylcyclohexane	108-87-2	ug/l	-	1.1 J	-	0.22 U	-	0.37 J	-	0.22 U	-	0.22 U
Methyl Tert Butyl Ether	1634-04-4	ug/l	-	0.24 U	-	0.24 U	-	0.24 U	-	0.24 U	-	0.24 U
4-Methyl-2-pentanone(MIBK)	108-10-1	ug/l	-	1.0 U	-	1.0 U	-	1.0 U	-	1.0 U	-	1.0 U
Methylene chloride	75-09-2	ug/l	-	0.73 U	-	0.73 U	-	0.73 U	-	0.73 U	-	0.73 U
Styrene	100-42-5	ug/l	-	0.27 U	-	0.27 U	-	0.27 U	-	0.27 U	-	0.27 U
1,1,2,2-Tetrachloroethane	79-34-5	ug/l	-	0.21 U	-	0.21 U	-	0.21 U	-	0.21 U	-	0.21 U
Tetrachloroethene	127-18-4	ug/l	-	0.40 U	-	0.40 U	-	0.40 U	-	0.40 U	-	0.40 U

## Accutest New Jersey

Job Numbers:	JB92815-JB9321
Account:	Cornerstone En
Project:	E203361 Ford R
Project Number:	140802

Client Sample ID:			OB-21-042015	OB-27-042115	OB-27-042115	PMP-180-042415	PMP-180-042415	PMP-230-042415	PMP-230-042415	PMP-50-042215	PMP-50-042215	PMP-POND-042215
Lab Sample ID:			JB92815-2F	JB92906-4	JB92906-4F	JB93282-1	JB93282-1F	JB93282-2	JB93282-2F	JB93030-9	JB93030-9F	JB93030-4
Date Sampled:			4/20/2015	4/21/2015	4/21/2015	4/24/2015	4/24/2015	4/24/2015	4/24/2015	4/22/2015	4/22/2015	4/22/2015
Matrix:	CAS#		Groundwater Filtered	Ground Water	Groundwater Filtered	Ground Water	Groundwater Filtered	Ground Water	Groundwater Filtered	Ground Water	Groundwater Filtered	Surface Water
Toluene	108-88-3	ug/l	-	0.16 U	-	0.16 U	-	0.20 J	-	0.16 U	-	0.16 U
1,2,4-Trichlorobenzene	120-82-1	ug/l	-	0.21 U	-	0.21 U	-	0.21 U	-	0.21 U	-	0.21 U
1,1,1-Trichloroethane	71-55-6	ug/l	-	0.25 U	-	0.25 U	-	0.25 U	-	0.25 U	-	0.25 U
1,1,2-Trichloroethane	79-00-5	ug/l	-	0.21 U	-	0.21 U	-	0.21 U	-	0.21 U	-	0.21 U
Trichloroethene	79-01-6	ug/l	-	0.22 U	-	0.22 U	-	0.22 U	-	0.22 U	-	0.22 U
Trichlorofluoromethane	75-69-4	ug/l	-	0.43 U	-	0.43 U	-	0.43 U	-	0.43 U	-	0.43 U
Vinyl chloride	75-01-4	ug/l	-	0.15 U	-	0.15 U	-	0.43 J	-	0.15 U	-	0.15 U
Xylene (total)	1330-20-7	ug/l	-	0.17 U	-	0.17 U	-	0.83 J	-	0.17 U	-	0.17 U

### GC/MS Volatile TIC

Total TIC, Volatile		ug/l	-	213.9 J	-	0	-	0	-	0	-	0
Total Alkanes		ug/l	-	0	-	0	-	0	-	0	-	0

### Metals Analysis

Calcium	7440-70-2	ug/l	11700	42800	42000	57000	58600	25300	23800	5000 U	5000 U	-
Iron	7439-89-6	ug/l	100 U	65200	61200	91600	93600	38000	35800	253	496	-
Magnesium	7439-95-4	ug/l	5170	5810	5770	5000 U	-					
Sodium	7440-23-5	ug/l	10000 U	-								

### General Chemistry

Alkalinity, Bicarbonate		mg/l	-	152	-	239	-	96.8	-	33.1	-	-
Alkalinity, Total as CaCO3		mg/l	-	152	-	239	-	96.8	-	33.1	-	-

## Accutest New Jersey

Job Numbers:	JB92815-JB9321
Account:	Cornerstone En
Project:	E203361 Ford R
Project Number:	140802

Client Sample ID:		OB-21-042015	OB-27-042115	OB-27-042115	PMP-180-042415	PMP-180-042415	PMP-230-042415	PMP-230-042415	PMP-50-042215	PMP-50-042215	PMP-POND-042215
Lab Sample ID:		JB92815-2F	JB92906-4	JB92906-4F	JB93282-1	JB93282-1F	JB93282-2	JB93282-2F	JB93030-9	JB93030-9F	JB93030-4
Date Sampled:		4/20/2015	4/21/2015	4/21/2015	4/24/2015	4/24/2015	4/24/2015	4/24/2015	4/22/2015	4/22/2015	4/22/2015
Matrix:	CAS#	Groundwater Filtered	Ground Water	Groundwater Filtered	Ground Water	Groundwater Filtered	Ground Water	Groundwater Filtered	Ground Water	Groundwater Filtered	Surface Water
Chloride	16887-00-6	mg/l	-	2.0 <sup>a</sup>	-	2.5	-	2.0 U	-	2.0 U	-
Nitrogen, Nitrate	14797-55-8	mg/l	-	0.11 U <sup>b</sup>	-	0.43 <sup>b</sup>	-	0.11 U <sup>b</sup>	-	0.11 U <sup>b</sup>	-
Nitrogen, Nitrate + Nitrite		mg/l	-	0.10 U	-	0.43	-	0.10 U	-	0.10 U	-
Nitrogen, Nitrite	14797-65-0	mg/l	-	0.010 U	-	0.010 U	-	0.010 U	-	0.010 U	-
Solids, Total Dissolved		mg/l	-	256	-	203	-	118	-	10 U	-
Sulfate	14808-79-8	mg/l	-	2.0 U <sup>a</sup>	-	10 U	-	10 U	-	10 U	-

### Footnotes:

<sup>a</sup> Analysis performed at Accutest Laboratories. (

<sup>b</sup> Calculated as: (Nitrogen, Nitrate + Nitrite) - (Ni

## Accutest New Jersey

Job Numbers:	JB92815-JB9321
Account:	Cornerstone En
Project:	E203361 Ford R
Project Number:	140802

Client Sample ID:		RW-6-042215	RW-6-042215	RW-6A-042115	RW-6A-042115	RW-7-042015	RW-7-042015	SC-1-042215	SC-1-042215	SR-3-SEEP-1-042215	SW-PAB-00-042215	SW-PAB-01-042215
Lab Sample ID:		JB93030-5	JB93030-5F	JB92926-3	JB92926-3F	JB92815-3	JB92815-3F	JB93030-2	JB93030-2F	JB93030-7	JB93030-10	JB93030-8
Date Sampled:		4/22/2015	4/22/2015	4/21/2015	4/21/2015	4/20/2015	4/20/2015	4/22/2015	4/22/2015	4/22/2015	4/22/2015	4/22/2015
Matrix:	CAS#	Ground Water	Groundwater Filtered	Surface Water	Surface Water	Surface Water						

### GC/MS Volatiles (SW846 8260C)

Acetone	67-64-1	ug/l	3.3 U	-	3.3 U	-	8.1 J	-	3.3 U	-	3.3 U	3.3 U	3.3 U
Benzene	71-43-2	ug/l	2.2	-	8.7	-	0.24 U	-	1.7	-	0.24 U	0.24 U	0.24 U
Bromodichloromethane	75-27-4	ug/l	0.23 U	-	0.23 U	0.23 U	0.23 U						
Bromoform	75-25-2	ug/l	0.23 U	-	0.23 U	0.23 U	0.23 U						
Bromomethane	74-83-9	ug/l	0.42 U	-	0.42 U	0.42 U	0.42 U						
2-Butanone (MEK)	78-93-3	ug/l	5.6 U	-	5.6 U	5.6 U	5.6 U						
Carbon disulfide	75-15-0	ug/l	0.25 U	-	0.25 U	0.25 U	0.25 U						
Carbon tetrachloride	56-23-5	ug/l	0.22 U	-	0.22 U	0.22 U	0.22 U						
Chlorobenzene	108-90-7	ug/l	0.19 U	-	0.19 U	-	0.19 U	-	0.30 J	-	0.19 U	0.19 U	0.19 U
Chloroethane	75-00-3	ug/l	1.7	-	2.3	-	0.34 U	-	1.8	-	0.34 U	0.34 U	0.34 U
Chloroform	67-66-3	ug/l	0.19 U	-	0.19 U	0.19 U	0.19 U						
Chloromethane	74-87-3	ug/l	0.41 U	-	0.41 U	0.41 U	0.41 U						
Cyclohexane	110-82-7	ug/l	0.28 U	-	4.2 J	-	0.28 U	-	1.7 J	-	0.28 U	0.28 U	0.28 U
1,2-Dibromo-3-chloropropane	96-12-8	ug/l	0.99 U	-	0.99 U	0.99 U	0.99 U						
Dibromochloromethane	124-48-1	ug/l	0.15 U	-	0.15 U	0.15 U	0.15 U						
1,2-Dibromoethane	106-93-4	ug/l	0.23 U	-	0.23 U	0.23 U	0.23 U						
1,2-Dichlorobenzene	95-50-1	ug/l	0.19 U	-	0.19 U	0.19 U	0.19 U						
1,3-Dichlorobenzene	541-73-1	ug/l	0.23 U	-	0.23 U	0.23 U	0.23 U						
1,4-Dichlorobenzene	106-46-7	ug/l	0.27 U	-	0.27 U	0.27 U	0.27 U						

Accutest New Jersey													
Job Numbers:	JB92815-JB9321												
Account:	Cornerstone En												
Project:	E203361 Ford R												
Project Number:	140802												
Client Sample ID:			RW-6-042215	RW-6-042215	RW-6A-042115	RW-6A-042115	RW-7-042015	RW-7-042015	SC-1-042215	SC-1-042215	SR-3-SEEP-1-042215	SW-PAB-00-042215	SW-PAB-01-042215
Lab Sample ID:			JB93030-5	JB93030-5F	JB92926-3	JB92926-3F	JB92815-3	JB92815-3F	JB93030-2	JB93030-2F	JB93030-7	JB93030-10	JB93030-8
Date Sampled:			4/22/2015	4/22/2015	4/21/2015	4/21/2015	4/20/2015	4/20/2015	4/22/2015	4/22/2015	4/22/2015	4/22/2015	4/22/2015
Matrix:	CAS#	Ground Water	Groundwater Filtered	Surface Water	Surface Water	Surface Water	Surface Water						
Dichlorodifluoromethane	75-71-8	ug/l	0.90 U	-	0.90 U	0.90 U	0.90 U						
1,1-Dichloroethane	75-34-3	ug/l	0.50 J	-	0.17 U	-	0.17 U	-	0.17 U	-	0.17 U	0.17 U	0.17 U
1,2-Dichloroethane	107-06-2	ug/l	0.18 U	-	0.18 U	0.18 U	0.18 U						
1,1-Dichloroethene	75-35-4	ug/l	0.51 U	-	0.51 U	0.51 U	0.51 U						
cis-1,2-Dichloroethene	156-59-2	ug/l	0.27 U	-	0.27 U	0.27 U	0.27 U						
trans-1,2-Dichloroethene	156-60-5	ug/l	0.65 U	-	0.65 U	0.65 U	0.65 U						
1,2-Dichloropropane	78-87-5	ug/l	0.39 U	-	0.39 U	0.39 U	0.39 U						
cis-1,3-Dichloropropene	10061-01-5	ug/l	0.21 U	-	0.21 U	0.21 U	0.21 U						
trans-1,3-Dichloropropene	10061-02-6	ug/l	0.19 U	-	0.19 U	0.19 U	0.19 U						
Ethylbenzene	100-41-4	ug/l	0.27 U	-	0.27 U	-	0.27 U	-	3.3	-	0.27 U	0.27 U	0.27 U
Freon 113	76-13-1	ug/l	0.52 U	-	0.52 U	0.52 U	0.52 U						
2-Hexanone	591-78-6	ug/l	1.7 U	-	1.7 U	1.7 U	1.7 U						
Isopropylbenzene	98-82-8	ug/l	0.23 U	-	8.5	-	0.23 U	-	1.9	-	0.23 U	0.23 U	0.23 U
Methyl Acetate	79-20-9	ug/l	1.9 U	-	1.9 U	1.9 U	1.9 U						
Methylcyclohexane	108-87-2	ug/l	0.22 U	-	1.5 J	-	0.22 U	-	1.6 J	-	0.22 U	0.22 U	0.22 U
Methyl Tert Butyl Ether	1634-04-4	ug/l	0.24 U	-	0.24 U	0.24 U	0.24 U						
4-Methyl-2-pentanone(MIBK)	108-10-1	ug/l	1.0 U	-	1.0 U	1.0 U	1.0 U						
Methylene chloride	75-09-2	ug/l	0.73 U	-	0.73 U	0.73 U	0.73 U						
Styrene	100-42-5	ug/l	0.27 U	-	0.27 U	0.27 U	0.27 U						
1,1,2,2-Tetrachloroethane	79-34-5	ug/l	0.21 U	-	0.21 U	0.21 U	0.21 U						
Tetrachloroethene	127-18-4	ug/l	0.40 U	-	0.40 U	0.40 U	0.40 U						

## Accutest New Jersey

Job Numbers:	JB92815-JB9321
Account:	Cornerstone En
Project:	E203361 Ford R
Project Number:	140802

Client Sample ID:			RW-6-042215	RW-6-042215	RW-6A-042115	RW-6A-042115	RW-7-042015	RW-7-042015	SC-1-042215	SC-1-042215	SR-3-SEEP-1-042215	SW-PAB-00-042215	SW-PAB-01-042215
Lab Sample ID:			JB93030-5	JB93030-5F	JB92926-3	JB92926-3F	JB92815-3	JB92815-3F	JB93030-2	JB93030-2F	JB93030-7	JB93030-10	JB93030-8
Date Sampled:			4/22/2015	4/22/2015	4/21/2015	4/21/2015	4/20/2015	4/20/2015	4/22/2015	4/22/2015	4/22/2015	4/22/2015	4/22/2015
Matrix:	CAS#		Ground Water	Groundwater Filtered	Surface Water	Surface Water	Surface Water						
Toluene	108-88-3	ug/l	0.16 U	-	0.16 U	-	0.16 U	-	0.48 J	-	0.16 U	0.16 U	0.16 U
1,2,4-Trichlorobenzene	120-82-1	ug/l	0.21 U	-	0.21 U	0.21 U	0.21 U						
1,1,1-Trichloroethane	71-55-6	ug/l	0.25 U	-	0.25 U	0.25 U	0.25 U						
1,1,2-Trichloroethane	79-00-5	ug/l	0.21 U	-	0.21 U	0.21 U	0.21 U						
Trichloroethene	79-01-6	ug/l	0.22 U	-	0.22 U	0.22 U	0.22 U						
Trichlorofluoromethane	75-69-4	ug/l	0.43 U	-	0.43 U	0.43 U	0.43 U						
Vinyl chloride	75-01-4	ug/l	0.15 U	-	0.15 U	0.15 U	0.15 U						
Xylene (total)	1330-20-7	ug/l	0.17 U	-	37.5	-	0.17 U	-	75.6	-	0.17 U	0.17 U	0.17 U

### GC/MS Volatile TIC

Total TIC, Volatile		ug/l	0	-	79.5 J	-	23 J	-	31.9 J	-	0	0	0
Total Alkanes		ug/l	0	-	0	-	0	-	0	-	0	0	0

### Metals Analysis

Calcium	7440-70-2	ug/l	73100	70900	80700	80700	10900	11700	41000	41600	-	-	-
Iron	7439-89-6	ug/l	40400	33200	24000	23800	522	100 U	84200	85800	-	-	-
Magnesium	7439-95-4	ug/l	12400	12000	18600	18700	5000 U	5000 U	5000 U	5000 U	-	-	-
Sodium	7440-23-5	ug/l	10000 U	-	-	-							

### General Chemistry

Alkalinity, Bicarbonate		mg/l	253	-	332	-	39.2	-	165	-	-	-	-
Alkalinity, Total as CaCO3		mg/l	254	-	332	-	39.2	-	165	-	-	-	-

## Accutest New Jersey

Job Numbers: JB92815-JB9321  
 Account: Cornerstone En  
 Project: E203361 Ford R  
 Project Number: 140802

Client Sample ID:			RW-6-042215	RW-6-042215	RW-6A-042115	RW-6A-042115	RW-7-042015	RW-7-042015	SC-1-042215	SC-1-042215	SR-3-SEEP-1-042215	SW-PAB-00-042215	SW-PAB-01-042215
Lab Sample ID:			JB93030-5	JB93030-5F	JB92926-3	JB92926-3F	JB92815-3	JB92815-3F	JB93030-2	JB93030-2F	JB93030-7	JB93030-10	JB93030-8
Date Sampled:			4/22/2015	4/22/2015	4/21/2015	4/21/2015	4/20/2015	4/20/2015	4/22/2015	4/22/2015	4/22/2015	4/22/2015	4/22/2015
Matrix:	CAS#		Ground Water	Groundwater Filtered	Surface Water	Surface Water	Surface Water						
Chloride	16887-00-6	mg/l	11.2	-	2.8	-	2.0 U <sup>a</sup>	-	2	-	-	-	-
Nitrogen, Nitrate	14797-55-8	mg/l	0.11 U <sup>b</sup>	-	-	-	-						
Nitrogen, Nitrate + Nitrite		mg/l	0.10 U	-	-	-	-						
Nitrogen, Nitrite	14797-65-0	mg/l	0.010 U	-	-	-	-						
Solids, Total Dissolved		mg/l	285	-	413	-	47	-	160	-	-	-	-
Sulfate	14808-79-8	mg/l	10 U	-	10 U	-	9.3 <sup>a</sup>	-	10 U	-	-	-	-

### Footnotes:

<sup>a</sup> Analysis performed at Accutest Laboratories, C

<sup>b</sup> Calculated as: (Nitrogen, Nitrate + Nitrite) - (Ni

Accutest New Jersey							May 12, 2015 13:18 pm			
Job Numbers:		JB92815-JB9321								
Account:		Cornerstone En								
Project:		E203361 Ford R								
Project Number:		140802								

Accutest New Jersey							May 12, 2015 13:18 pm	
Job Numbers:	JB92815-JB9321							
Account:	Cornerstone En							
Project:	E203361 Ford R							
Project Number:	140802						Legend:	Hit
Client Sample ID:		SW-PAB-01A-042215	TB-02-042115	TB-042015	TB-042115	TB-042215	TRIP BLANK 4-23-15	
Lab Sample ID:		JB93030-6	JB92926-2	JB92815-1	JB92906-2	JB93030-1	JB93282-3	
Date Sampled:		4/22/2015	4/21/2015	4/20/2015	4/21/2015	4/22/2015	4/24/2015	
Matrix:	CAS#	Surface Water	Trip Blank Water	Trip Blank Water	Trip Blank Water	Trip Blank Water	Trip Blank Water	
Dichlorodifluoromethane	75-71-8	ug/l	0.90 U					
1,1-Dichloroethane	75-34-3	ug/l	0.17 U					
1,2-Dichloroethane	107-06-2	ug/l	0.18 U					
1,1-Dichloroethene	75-35-4	ug/l	0.51 U					
cis-1,2-Dichloroethene	156-59-2	ug/l	0.27 U					
trans-1,2-Dichloroethene	156-60-5	ug/l	0.65 U					
1,2-Dichloropropane	78-87-5	ug/l	0.39 U					
	10061-01-5	ug/l						
cis-1,3-Dichloropropene	10061-02-6	ug/l	0.21 U					
trans-1,3-Dichloropropene			0.19 U					
Ethylbenzene	100-41-4	ug/l	0.27 U					
Freon 113	76-13-1	ug/l	0.52 U					
2-Hexanone	591-78-6	ug/l	1.7 U					
Isopropylbenzene	99-82-8	ug/l	0.23 U					
Methyl Acetate	79-20-9	ug/l	1.9 U					
Methylcyclohexane	108-87-2	ug/l	0.22 U					
Methyl Tert Butyl Ether	1634-04-4	ug/l	0.24 U					
4-Methyl-2-pentanone(MIBK)	108-10-1	ug/l	1.0 U					
Methylene chloride	75-09-2	ug/l	0.73 U					
Styrene	100-42-5	ug/l	0.27 U					
1,1,2,2-Tetrachloroethane	79-34-5	ug/l	0.21 U					
Tetrachloroethene	127-18-4	ug/l	0.40 U					

Accutest New Jersey							May 12, 2015 13:18 pm			
Job Numbers:		JB92815-JB9321								
Account:		Cornerstone En								
Project:		E203361 Ford R								
Project Number:		140802								
Legend: <span style="background-color: red; color: white; padding: 2px 5px;">Hit</span>										
Client Sample ID:			SW-PAB-01A-042215	TB-02-042115	TB-042015	TB-042115	TB-042215	TRIP BLANK 4-23-15		
Lab Sample ID:			JB93030-6	JB92926-2	JB92815-1	JB92906-2	JB93030-1	JB93282-3		
Date Sampled:			4/22/2015	4/21/2015	4/20/2015	4/21/2015	4/22/2015	4/24/2015		
Matrix:	CAS#		Surface Water	Trip Blank Water	Trip Blank Water	Trip Blank Water	Trip Blank Water	Trip Blank Water		
Toluene	108-88-3	ug/l	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U		
1,2,4-Trichlorobenzene	120-82-1	ug/l	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U		
1,1,1-Trichloroethane	71-55-6	ug/l	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U		
1,1,2-Trichloroethane	79-00-5	ug/l	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U		
Trichloroethene	79-01-6	ug/l	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U		
Trichlorofluoromethane	75-69-4	ug/l	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U		
Vinyl chloride	75-01-4	ug/l	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U		
Xylene (total)	1330-20-7	ug/l	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U		
<b>GC/MS Volatile TIC</b>										
Total TIC, Volatile		ug/l	0	0	0	0	0	0		
Total Alkanes		ug/l	0	0	0	0	0	0		
<b>Metals Analysis</b>										
Calcium	7440-70-2	ug/l	-	-	-	-	-	-		
Iron	7439-89-6	ug/l	-	-	-	-	-	-		
Magnesium	7439-95-4	ug/l	-	-	-	-	-	-		
Sodium	7440-23-5	ug/l	-	-	-	-	-	-		
<b>General Chemistry</b>										
Alkalinity, Bicarbonate		mg/l	-	-	-	-	-	-		
Alkalinity, Total as CaCO <sub>3</sub>		mg/l	-	-	-	-	-	-		

Accutest New Jersey							May 12, 2015 13:18 pm	
Job Numbers:	JB92815-JB9321							
Account:	Cornerstone En							
Project:	E203361 Ford R							
Project Number:	140802							
							Legend:	Hit
Client Sample ID:			SW-PAB-01A-042215	TB-02-042115	TB-042015	TB-042115	TB-042215	TRIP BLANK 4-23-15
Lab Sample ID:			JB93030-6	JB92926-2	JB92815-1	JB92906-2	JB93030-1	JB93282-3
Date Sampled:			4/22/2015	4/21/2015	4/20/2015	4/21/2015	4/22/2015	4/24/2015
Matrix:	CAS#		Surface Water	Trip Blank Water	Trip Blank Water	Trip Blank Water	Trip Blank Water	Trip Blank Water
Chloride	16887-00-6	mg/l	-	-	-	-	-	-
Nitrogen, Nitrate	14797-55-8	mg/l	-	-	-	-	-	-
Nitrogen, Nitrate + Nitrite		mg/l	-	-	-	-	-	-
Nitrogen, Nitrite	14797-65-0	mg/l	-	-	-	-	-	-
Solids, Total Dissolved		mg/l	-	-	-	-	-	-
Sulfate	14808-79-8	mg/l	-	-	-	-	-	-

**TABLE 1**  
**SUMMARY OF SURFACE WATER ANALYTICAL RESULTS:**  
**VOLATILE ORGANIC COMPOUNDS**  
Ringwood Mines  
Ringwood Borough, Passaic County, New Jersey  
(Concentrations reported in ug/L)

PARAMETER				Ace	c-DCE	1,1-DCA	1,2-DCA	1,4-Dcb	MeC	Cyc	1,4-Dio	Dcfm	Mch	Cle	Ben	Clb	Etb	Iso	Tol	Xyl	Total VOCs	VOC TICs	
NJDEP SURFACE WATER QUALITY STANDARDS (FW2 HUMAN HEALTH)				---	---	---	0.29	550	2.5	---	---	---	---	---	0.15	210	530	---	1,300	---	---	---	
Well	Lab Sample No.	Sample Matrix	Collection																				
			Date	Time																			
PMP-Pond-042215	460-93682-3	Aqueous	4/22/2015	1030	<1.1	<0.26	<0.24	<0.25	<0.33	<0.21	<0.26	<8.7	<0.14	<0.22	<0.37	<0.09	<0.24	<0.30	<0.32	<0.25	<0.28	ND	ND
SW-PAB-01A	460-93682-4	Aqueous	4/22/2015	1500	<1.1	<0.26	<0.24	<0.25	<0.33	<0.21	<0.26	<8.7	<0.14	<0.22	<0.37	<0.09	<0.24	<0.30	<0.32	<0.25	<0.28	ND	ND
SR3-Seep-1-042215	460-93682-5	Aqueous	4/22/2015	1530	<1.1	<0.26	<0.24	<0.25	<0.33	<0.21	<0.26	<8.7	<0.14	<0.22	0.57 J	0.23 J	<0.24	<0.30	<0.32	<0.25	<0.28	0.80	ND
SW-PAB-01	460-93682-6	Aqueous	4/22/2015	1540	<1.1	<0.26	<0.24	<0.25	<0.33	<0.21	<0.26	<8.7	<0.14	<0.22	<0.37	<0.09	<0.24	<0.30	<0.32	<0.25	<0.28	ND	ND
SW-PAB-00	460-93682-8	Aqueous	4/22/2015	1630	<1.1	<0.26	<0.24	<0.25	<0.33	<0.21	<0.26	<8.7	<0.14	<0.22	<0.37	<0.09	<0.24	<0.30	<0.32	<0.25	<0.28	ND	ND
TB	460-93682-9	Aqueous	4/21/2015	---	<1.1	<0.26	<0.24	<0.25	<0.33	0.44 J	<0.26	<8.7	<0.14	<0.22	<0.37	<0.09	<0.24	<0.30	<0.32	<0.25	<0.28	0.44	ND

**KEY:**

ug/L - micrograms per liter  
Ace - Acetone  
c-DCE - cis-1,2-Dichloroethene  
1,1-DCA - 1,1-Dichloroethane  
1,2-DCA - 1,2-Dichloroethane  
1,4-Dcb - 1,4-Dichlorobenzene

MeC - Methylene Chloride  
Cyc - Cyclohexane  
1,4-Dio - 1,4-Dioxane  
Dcfm - Dichlorodifluoromethane  
Mch - Methylcyclohexane  
Cle - Chloroethane  
Ben - Benzene  
Clb - Chlorobenzene  
Etb - Ethylbenzene  
Iso - Isopropylbenzene  
Tol - Toluene  
Xyl - Total Xylenes

VOCs - Volatile Organic Compounds  
TICs - Tentatively Identified Compounds  
ND - Not Detected above the Method Detection Limit

**NOTES:**  
\* - Interim Generic Criteria for synthetic organic compounds lacking evidence of carcinogenicity is 100 ug/L each and 500 ug/L total.  
J - Result is less than the Reporting Limit but greater than or equal to the Method Detection Limit and the concentration is an approximate value.  
D - Sample results are obtained from a dilution; the surrogate or matrix spike recoveries reported are calculated from diluted samples.  
**BOLD** and Shaded - Indicates an exceedance of the New Jersey Department of Environmental Protection Surface Water Quality Standards (FW2).

**TABLE 2**  
**SUMMARY OF GROUNDWATER ANALYTICAL RESULTS:**  
**VOLATILE ORGANIC COMPOUNDS**

Ringwood Mines  
 Ringwood Borough, Passaic County, New Jersey  
 (Concentrations reported in ug/L)

PARAMETER				Ace	c-DCE	1,1-DCA	1,2-DCA	1,4-Dcb	MeC	Cyc	1,4-Dio	Dcfm	Mch	Cle	Ben	Clb	Etb	Iso	Tol	Xyl	Total VOCs	VOC TICs	
NJDEP CLASS II-A GROUNDWATER QUALITY CRITERIA				6,000	70	50	2	75	3	---	10	1,000	---	5	1	50	700	700	600	1000	---	100/500*	
Well	Lab Sample No.	Sample Matrix	Collection																				
			Date	Time																			
OB-21	460-93547-1	Aqueous	4/20/2015	1150	<1.1	<0.26	<0.24	<0.25	<0.33	<0.21	<0.26	<8.7	<0.14	<0.22	<0.37	<0.09	<0.24	<0.30	<0.32	<0.25	<0.28	ND	ND
RW-7	460-93547-2	Aqueous	4/20/2015	1450	<1.1	<0.26	<0.24	<0.25	<0.33	<0.21	<0.26	<8.7	<0.14	<0.22	<0.37	<0.09	<0.24	<0.30	<0.32	<0.25	<0.28	ND	ND
OB-20A	460-93618-1	Aqueous	4/21/2015	0925	<1.1	<0.26	<0.24	<0.25	<0.33	<0.21	<0.26	<8.7	<0.14	<0.22	<0.37	<0.09	<0.24	<0.30	<0.32	<0.25	<0.28	ND	ND
OB-20B	460-93618-2	Aqueous	4/21/2015	1315	<1.1	<0.26	<0.24	<0.25	<0.33	<0.21	0.96 J	<8.7	<0.14	0.39 J	2.2	0.31 J	<0.24	<0.30	<0.32	<0.25	<0.28	3.86	5.3
OB-27	460-93618-3	Aqueous	4/21/2015	1535	<1.1	0.44 J	0.37 J	0.26 J	<0.33	<0.21	1.5	<8.7	<0.14	0.91 J	<b>62</b>	<b>3</b>	<0.24	<0.30	2.5	<0.25	<0.28	70.98	76
OB-11R	460-93618-5	Aqueous	4/21/2015	1735	<1.1	<0.26	<0.24	<0.25	<0.33	<0.21	2.3	<8.7	<0.14	<0.22	<b>14</b>	<b>2.6</b>	<0.24	<0.30	0.67 J	<0.25	<0.28	19.57	13.2
RW-6A	460-93618-6	Aqueous	4/21/2015	1920	<1.1	<0.26	<0.24	<0.25	<0.33	<0.21	3.3	<8.7	<0.14	1.0	1.6	<b>8.4</b>	<0.24	<0.30	7.1	<0.25	38	59.4	153.5
SC-1	460-93682-1	Aqueous	4/22/2015	1010	<1.1	<0.26	<0.24	<0.25	<0.33	<0.21	2.1	<8.7	0.20 J	1.6	1.8	<b>1.4</b>	<0.24	2.2	1.5	0.36 J	59	70.16	10.6
Duplicate	460-93682-10	Aqueous	---	---	<1.1	<0.26	<0.24	<0.25	<0.33	<0.21	<0.26	<8.7	<0.14	1.5	1.4	<b>1.5</b>	<0.24	2.6	1.6	0.39 J	64	72.99	18.7
RW-6	460-93682-2	Aqueous	4/22/2015	1250	<1.1	<0.26	<0.24	<0.25	<0.33	<0.21	<0.26	<8.7	<0.14	<0.22	1.3	<b>1.6</b>	<0.24	<0.30	<0.32	<0.25	<0.28	2.9	ND
PMP-50-042215	460-93682-7	Aqueous	4/22/2015	1540	<1.1	<0.26	<0.24	<0.25	<0.33	<0.21	<0.26	<8.7	<0.14	<0.22	<0.37	<0.09	<0.24	<0.30	<0.32	<0.25	<0.28	ND	ND
PM Air Shaft-180-	460-93796-1	Aqueous	4/24/2015	1100	<1.1	<0.26	0.70 J	<0.25	0.75 J	<0.21	1.8	<b>25 J</b>	<0.14	0.36 J	<b>17</b>	<b>7.8</b>	1.4	<0.30	1.9	<0.25	0.63 J	57.34	ND
PM Air Shaft-230-	460-93796-2	Aqueous	4/24/2015	1230	<1.1	0.37 J	<0.24	<0.25	<0.33	<0.21	0.32 J	<8.7	<0.14	<0.22	4.1	<b>2.3</b>	0.42 J	<0.30	0.50 J	<0.25	<0.28	8.01	ND
TB	460-93796-3	Aqueous	4/24/2015	---	<1.1	<0.26	<0.24	<0.25	<0.33	<0.21	<0.26	<8.7	<0.14	<0.22	<0.37	<0.09	<0.24	<0.30	<0.32	<0.25	<0.28	ND	ND
TB	460-93547-2	Aqueous	4/17/2015	---	12	<0.26	<0.24	<0.25	<0.33	<0.21	<0.26	<8.7	<0.14	<0.22	<0.37	<0.09	<0.24	<0.30	<0.32	<0.25	<0.28	12	ND
TB	460-93618-4	Aqueous	4/20/2015	---	<1.1	<0.26	<0.24	<0.25	<0.33	<0.21	<0.26	<8.7	<0.14	<0.22	<0.37	<0.09	<0.24	<0.30	<0.32	<0.25	<0.28	ND	ND
TB	460-93682-9	Aqueous	4/21/2015	---	<1.1	<0.26	<0.24	<0.25	<0.33	0.44 J	<0.26	<8.7	<0.14	<0.22	<0.37	<0.09	<0.24	<0.30	<0.32	<0.25	<0.28	0.44	ND

**KEY:**

ug/L - micrograms per liter

Ace - Acetone

c-DCE - cis-1,2-Dichloroethene

1,1-DCA - 1,1-Dichloroethane

1,2-DCA - 1,2-Dichloroethane

1,4-Dcb - 1,4-Dichlorobenzene

MeC - Methylene Chloride

Cyc - Cyclohexane

1,4-Dio - 1,4-Dioxane

Dcfm - Dichlorodifluoromethane

Mch - Methylcyclohexane

Cle - Chloroethane

Ben - Benzene

Clb - Chlorobenzene

Etb - Ethylbenzene

Iso - Isopropylbenzene

Tol - Toluene

Xyl - Total Xylenes

VOCs - Volatile Organic Compounds

TICs - Tentatively Identified Compounds

ND - Not Detected above the Method Detection Limit

**NOTES:**

\* - Interim Generic Criteria for synthetic organic compounds lacking evidence of carcinogenicity is 100 ug/L each and 500 ug/L total.

J - Result is less than the Reporting Limit but greater than or equal to the Method Detection Limit and the concentration is an approximate value.

D - Sample results are obtained from a dilution; the surrogate or matrix spike recoveries reported are calculated from diluted samples.

**BOLD** and **Shaded** - Indicates an exceedance of the New Jersey Department of Environmental Protection (NJDEP) Class II-A Groundwater Quality Criteria (GWQC).

**TABLE 3**  
**SUMMARY OF GROUNDWATER ANALYTICAL RESULTS:**  
**TOTAL AND DISSOLVED METALS**  
Ringwood Mines  
Ringwood Borough, Passaic County, New Jersey  
(Concentrations reported in ug/L)

PARAMETER				Total Fe	Dissolved Fe	Total Na	Dissolved Na	Total Mg	Dissolved Mg	Total Ca	Dissolved Ca	
NJDEP CLASS II-A GROUNDWATER QUALITY CRITERIA				300	300	50,000	50,000	---	---	---	---	
Well	Lab Sample No.	Sample Matrix	Collection									
			Date	Time								
OB-21	460-93547-1	Aqueous	4/20/2015	1150	2,120	65.4 J	3,540 J	3,810 J	5,040	4,790 J	10,600	10,900
RW-7	460-93547-2	Aqueous	4/20/2015	1450	504	ND	3,720 J	4,130 J	4,180 J	4,280 J	11,600	12,000
OB-20A	460-93618-1	Aqueous	4/21/2015	0925	26,500	ND	3,090 J	3,290 J	3,240 J	3,290 J	29,500	30,000
OB-20B	460-93618-2	Aqueous	4/21/2015	1315	44,500	ND	4,700 J	4,740 J	11,300	11,500	59,100	58,800
OB-27	460-93618-3	Aqueous	4/21/2015	1535	60,200	726	2,900 J	2,970 J	5,330	5,550	38,700	39,600
OB-11R	460-93618-5	Aqueous	4/21/2015	1735	68,200	16,600	3,120 J	3,320 J	6,870	7,370	53,500	56,000
RW-6A	460-93618-6	Aqueous	4/21/2015	1920	23,100	12,500	7,060	7,050	17,600	17,700	77,900	77,300
SC-1	460-93682-1	Aqueous	4/22/2015	1010	78,200	51,300	3,530 J	3,520 J	4,450 J	4,410 J	38,300	37,900
Duplicate	460-93682-10	Aqueous	---	---	78,600	43,800	3,560 J	3,660 J	4,460 J	4,600 J	38,300	39,200
RW-6	460-93682-2	Aqueous	4/22/2015	1250	31,800	6,450	9,390	8,670	11,800	11,900	67,900	66,700
PMP-50-042215	460-93682-7	Aqueous	4/22/2015	1540	409	ND	2,120 J	1,710 J	1,220 J	983 J	4,050 J	3,260 J
PM Air Shaft-180-042415	460-93796-1	Aqueous	4/24/2015	1100	96,800	83,400	5,510	5,740	5,250	5,460	58,200	60,200
PM Air Shaft-230-042415	460-93796-2	Aqueous	4/24/2015	1230	28,100	25,700	3,100 J	3,540 J	2,400 J	2,910 J	19,700	26,500

**KEY:**

ug/L - micrograms per liter

Fe - Iron

Na - Sodium

Mg - Magnesium

Ca - Calcium

ND - Not Detected above the Method Detection Limit

**NOTES:**

Sample collection times denoted in military time.

J - The result is less than the specified quantitation limit but greater than or equal to the method detection limit.

**TABLE 4**  
**SUMMARY OF GROUNDWATER ANALYTICAL RESULTS:**  
**GEOCHEMICAL PARAMETERS**  
Ringwood Mines  
Ringwood Borough, Passaic County, New Jersey  
(Concentrations reported in mg/L)

PARAMETER				Alkalinity (mg/L)	Bicarbonate Alkalinity as CaCO <sub>3</sub> /L	Carbonate Alkalinity as CaCO <sub>3</sub> /L	Chloride (mg/L)	Nitrate/Nitrite as N (mg/L)	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	
NJDEP CLASS II-A GROUNDWATER QUALITY CRITERIA				---	---	---	250	10	250	500	
Well	Lab Sample No.	Sample Matrix	Collection								
			Date	Time							
OB-21	460-93547-1	Aqueous	4/20/2015	1150	NA	NA	NA	NA	0.078	6.9	66.0
RW-7	460-93547-2	Aqueous	4/20/2015	1450	NA	NA	NA	NA	0.026 J	16.6	70.0
OB-20A	460-93618-1	Aqueous	4/21/2015	0925	NA	NA	NA	NA	0.032 J	NA	125
OB-20B	460-93618-2	Aqueous	4/21/2015	1315	234	234	ND	NA	0.019 J	ND	295
OB-27	460-93618-3	Aqueous	4/21/2015	1535	153	153	ND	2.5 J	0.020 J	ND	183
OB-11R	460-93618-5	Aqueous	4/21/2015	1735	204	204	ND	3.0 J	ND	ND	224
RW-6A	460-93618-6	Aqueous	4/21/2015	1920	338	338	ND	2.5 J	0.023 J	ND	376
SC-1	460-93682-1	Aqueous	4/22/2015	1010	183	183	ND	2.5 J	ND	ND	253
Duplicate	460-93682-10	Aqueous	---	---	174	174	ND	2.0 J	ND	ND	251
RW-6	460-93682-2	Aqueous	4/22/2015	1250	245	245	ND	10	ND	ND	311
PMP-50-042215	460-93682-7	Aqueous	4/22/2015	1540	15.7	15.7	ND	1.5 J	ND	5.4	53.0
PM Air Shaft-180-042415	460-93796-1	Aqueous	4/24/2015	1100	218	218	ND	3.5 J	0.037 J	ND	285
PM Air Shaft-230-042415	460-93796-2	Aqueous	4/24/2015	1230	77.8	77.8	ND	3.0 J	ND	3.3 J	118

**KEY:**

mg/L - milligrams/L

ND - Not Detected above the Method Detection Limit

NA - Not Analyzed

**NOTES:**

Sample collection times denoted in military time.

J - The result is less than the specified quantitation limit but greater than or equal to the method detection limit.

**Table 13**  
**Groundwater Monitoring Results: 2004-2014**

**Site-Related Groundwater Remedial Investigation Report**  
**Ringwood Mines/Landfill Superfund Site**  
**Ringwood, New Jersey**

Well ID	Sample Depth (ft bgs)	Sample Date	Benzene	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062 Method)	Dissolved Arsenic (USEPA 7062 Method)
CM SHAFT	50'	5/7/2012	< 0.22	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
		9/12/2014	< 0.21	< 2.6	< 3.8 B	< 2.6	< 1.3	NA	NA
	100'	5/7/2012	< 0.22	< 0.97	1.7 B	< 0.97	< 1.7	NA	NA
		9/18/2014	< 0.21	R	2.4 J	R	< 1.3	NA	NA
	160'	5/9/2012	< 0.22	< 0.97	< 3.0	< 0.97	< 1.7	NA	NA
		9/18/2014	< 0.21	< 2.6	13.2 J	< 2.6	< 3.0 B	NA	NA
	275'	5/9/2012	< 0.22	< 0.97	< 3.0	< 0.97	< 1.7	NA	NA
		9/19/2014	< 0.21	< 2.6	104	< 2.6	< 3.0 B	NA	NA
OB-01	5-31'	11/1/2004	< 1.0	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
		12/30/2004	< 0.31	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
		9/26/2006	< 0.21	< 1.5 J	< 2.6	1.8 BJ	< 2.6	NA	NA
		4/6/2007	< 0.21	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
		10/9/2007	< 0.19	< 1.1	< 0.94	< 1.1	< 0.94	NA	NA
		4/30/2008	< 0.26	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
		9/8/2008	< 0.26	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
		7/2/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		10/22/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		5/26/2010	< 0.23	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
		5/20/2011	< 0.26	< 0.92	1.2 B	< 0.92	< 0.94	NA	NA
		4/26/2012	< 0.22	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
OB-02	8-42'	10/13/2004	< 0.50	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
		10/2/2006	< 0.21	< 1.5	< 2.6	2.0	< 2.6	NA	NA
		4/6/2007	< 0.21	< 1.5	3.2	< 1.5	< 2.8	NA	NA
		10/8/2007	< 0.19	< 1.1	< 0.94	< 1.1	< 0.94	NA	NA
		4/28/2008	< 0.26	< 1.7	1.8 B	< 1.7	< 1.4	NA	NA
		9/17/2008	< 0.26	< 1.7	< 1.4	1.7 B	< 1.4	NA	NA
		6/30/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		10/20/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		5/25/2010	< 0.23	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
		5/16/2011	< 0.26	< 0.92	1.3 B	< 0.92	< 1.1	NA	NA
		4/19/2012	< 0.22	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
		11/18/2013	< 0.28	< 1.5	2.6 B	< 1.5	< 2.4	NA	NA
		9/15/2014	< 0.21	< 2.6	< 1.3	< 3.0 B	< 1.3	NA	NA

**Table 13**  
**Groundwater Monitoring Results: 2004-2014**

**Site-Related Groundwater Remedial Investigation Report**  
**Ringwood Mines/Landfill Superfund Site**  
**Ringwood, New Jersey**

Well ID	Sample Depth (ft bgs)	Sample Date	Benzene	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062 Method)	Dissolved Arsenic (USEPA 7062 Method)
OB-03	9-24'	10/13/2004	< 0.50	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
		9/28/2006	< 0.21	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
		4/3/2007	< 0.21	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
		10/8/2007	< 0.19	< 1.1	< 0.94	< 1.1	< 0.94	NA	NA
		4/28/2008	< 0.26	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
		9/9/2008	< 0.26	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
		6/30/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		10/20/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		5/25/2010	< 0.23	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
		5/17/2011	< 0.26	< 0.92	< 0.94	< 0.92	< 0.94	NA	NA
		4/23/2012	< 0.22	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
		4/23/2012	< 0.22	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
		11/15/2013	< 0.28 J	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
		9/8/2014	< 0.21	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
		9/8/2014	< 0.21	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
OB-04	28-61'	10/14/2004	< 0.50	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
		9/29/2006	< 0.21	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
		4/6/2007	< 0.21	< 1.5	4.1	< 1.5	< 2.8	NA	NA
		10/9/2007	< 0.19	< 1.1	< 0.94	< 1.1	< 0.94	NA	NA
		4/28/2008	< 0.26	< 1.7	1.6 B	< 1.7	< 1.4	NA	NA
		9/10/2008	< 0.26	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
		7/1/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		10/21/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		5/26/2010	< 0.23	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
		5/17/2011	< 0.26	1.1 B	1.2 B	< 0.92	< 0.94	NA	NA
		4/27/2012	< 0.22	< 0.97	1.9 J	< 0.97	< 1.7	NA	NA
		11/13/2013	< 0.28	1.7 B	< 3.9 B	2.2 B	< 3.4 B	NA	NA
		9/15/2014	< 0.21	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
OB-05	18-63'	10/15/2004	< 0.50	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
		10/2/2006	< 0.21	< 1.5	< 2.6	< 1.5	2.6 B	NA	NA
		4/4/2007	< 0.21	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
		10/9/2007	< 0.19	< 1.1	< 0.94	< 1.1	< 0.94	NA	NA
		4/28/2008	< 0.26	< 1.7	1.5 B	< 1.7	1.4 B	NA	NA
		9/9/2008	< 0.26	< 1.7	1.7 B	< 1.7	< 1.4	NA	NA
		7/1/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		10/21/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		5/26/2010	< 0.23	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
		5/17/2011	< 0.26	< 0.92	1.2 B	< 0.92	< 0.94	NA	NA
		4/19/2012	< 0.22	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
		4/19/2012	< 0.22	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
		11/11/2013	< 0.28	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
		9/8/2014	< 0.21	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA

**Table 13**  
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**Site-Related Groundwater Remedial Investigation Report**  
**Ringwood Mines/Landfill Superfund Site**  
**Ringwood, New Jersey**

Well ID	Sample Depth (ft bgs)	Sample Date	Benzene	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062 Method)	Dissolved Arsenic (USEPA 7062 Method)
OB-06	10-36'	11/2/2004	< 0.31	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
		12/30/2004	< 0.31	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
		9/26/2006	< 0.21	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
		4/6/2007	< 0.21	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
		10/9/2007	< 0.19	< 1.1	< 0.94	< 1.1	< 0.94	NA	NA
		5/1/2008	< 0.26	< 1.7	< 1.4	< 1.7	1.9 B	NA	NA
		9/8/2008	< 0.26	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
		7/2/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		11/15/2013	< 0.28 J	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
		9/8/2014	< 0.21	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
OB-07	14-42'	10/13/2004	< 0.50	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
		10/13/2004	< 0.50	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
		9/28/2006	< 0.21	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
		4/11/2007	< 0.21	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
		10/9/2007	< 0.19	< 1.1	< 0.94	< 1.1	< 0.94	NA	NA
		4/30/2008	< 0.26	< 1.7	2.9 B	2.0 B	1.9 B	NA	NA
		9/10/2008	< 0.26	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
		9/10/2008	< 0.26	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
		7/1/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		10/21/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		5/25/2010	< 0.23	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
		5/25/2010	< 0.23	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
		5/17/2011	< 0.26	< 0.92	1.2 B	< 0.92	1.3 B	NA	NA
		4/19/2012	< 0.22	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
		11/12/2013	< 0.28	< 3.0 B	< 2.4	< 3.0 B	< 2.4	NA	NA
		11/12/2013	< 0.28	< 3.0 B	< 2.4	< 3.0 B	< 2.4	NA	NA
		9/5/2014	< 0.21	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
		9/5/2014	< 0.21	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
OB-10	10-20'	10/14/2004	< 0.50	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
		10/2/2006	< 0.21	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
		4/2/2007	< 0.21	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
		10/12/2007	< 0.19	< 1.1	< 0.94	< 1.1	< 0.94	NA	NA
		4/29/2008	< 0.26	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
		9/10/2008	< 0.26	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
		7/1/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		10/21/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		10/21/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		5/26/2010	< 0.23	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
		5/17/2011	< 0.26	< 0.92	< 0.94	< 0.92	< 0.94	NA	NA
		5/17/2011	< 0.26	< 0.92	< 0.94	< 0.92	< 0.94	NA	NA
		4/20/2012	< 0.22	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
		11/14/2013	< 0.28 J	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
		9/9/2014	< 0.21	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
		9/9/2014	< 0.21	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA

**Table 13**  
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Well ID	Sample Depth (ft bgs)	Sample Date	Benzene	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062 Method)	Dissolved Arsenic (USEPA 7062 Method)
OB-11	25-40'	10/14/2004	1.2	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
OB-11R	25-40'	6/11/2010	5.2	24.9	< 1.9	3.8	< 1.9	NA	NA
		5/18/2011	3.7	23.9	7.4	19.5	2.4 B	NA	NA
		4/26/2012	3.7	21.0	4.5	7.5 J	3.7 J	NA	NA
		11/8/2013	4.7	25.3	< 2.4	7.3	< 2.4	NA	NA
		9/11/2014	3.5	26.6	< 1.3	6.1	< 1.3	31.2	0.4 J
		9/11/2014	NA	NA	NA	NA	NA	31	< 0.2
		3/20/2015	3.2	NA	NA	NA	NA	NA	NA
		4/21/2015	2.9	NA	NA	NA	NA	NA	NA
OB-12	9-40'	11/1/2004	< 1.0	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
		12/30/2004	< 0.31	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
		9/28/2006	< 0.21	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
		4/3/2007	< 0.21	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
		10/8/2007	< 0.19	< 1.1	< 0.94	< 1.1	< 0.94	NA	NA
		4/28/2008	< 0.26	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
		9/9/2008	< 0.26	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
		6/30/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		6/30/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		10/20/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		5/25/2010	< 0.23	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
		5/17/2011	< 0.26	< 0.92	< 0.94	< 0.92	< 0.94	NA	NA
		4/19/2012	< 0.22	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
		11/18/2013	< 0.28	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
		9/15/2014	< 0.21	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
OB-13	8-60'	10/13/2004	< 0.50	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
		10/3/2006	< 0.21	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
		4/3/2007	< 0.21	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
		10/8/2007	< 0.19	< 1.1	< 0.94	< 1.1	< 0.94	NA	NA
		4/28/2008	< 0.26	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
		9/10/2008	< 0.26	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
		7/1/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		10/21/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		5/25/2010	< 0.23	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
		5/17/2011	< 0.26	< 0.92	< 0.94	< 0.92	< 0.94	NA	NA
		4/20/2012	< 0.22	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
		11/13/2013	< 0.28	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
		9/8/2014	< 0.21	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA

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Well ID	Sample Depth (ft bgs)	Sample Date	Benzene	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062 Method)	Dissolved Arsenic (USEPA 7062 Method)
OB-14A	4-14'	10/12/2004	< 0.50	16.7	< 3.0	19.6	< 3.0	NA	NA
		9/27/2006	< 0.21	4.5 J	< 2.6	5.5 J	< 2.6	NA	NA
		4/9/2007	< 0.21	2.4	3.3	< 1.5	2.9 B	NA	NA
		10/11/2007	< 0.19	23.1	1.4 B	5.6	< 0.94	NA	NA
		10/11/2007	< 0.19	21.6	1 B	5	1.2 B	NA	NA
		4/30/2008	< 0.26	14.4	4.0	3.8	2.7 B	NA	NA
		9/11/2008	< 0.26	2.3 BJ	< 1.4	< 1.7	< 1.4	NA	NA
		7/6/2009	< 0.23	< 3.0	< 1.7	< 3.0	< 1.7	NA	NA
		10/23/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		5/28/2010	< 0.23	1.8 B	< 1.9	< 1.4	< 1.9	NA	NA
		5/19/2011	< 0.26	< 0.92	3.8 J	< 0.92	< 3.0	NA	NA
		4/18/2012	< 0.22	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
		11/6/2013	< 0.28	2.8 B	< 3.6 B	< 1.5	< 2.4	NA	NA
		9/3/2014	< 0.21	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
		9/11/2014	< 0.21	4.8	< 1.3	3.5	< 1.3	5.2	0.5 J
OB-14B	25-35'	10/12/2004	< 0.50	< 5.0	3.6	< 5.0	< 3.0	NA	NA
		9/27/2006	< 0.21	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
		4/9/2007	< 0.21	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
		10/11/2007	< 0.19	2.8 B	1.1 B	1.6 B	< 0.94	NA	NA
		4/30/2008	< 0.26	2.1 B	3.2	< 1.7	2.1 B	NA	NA
		9/11/2008	< 0.26	2 BJ	< 1.4	2.6 BJ	< 1.4	NA	NA
		7/6/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		10/23/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		5/28/2010	< 0.23	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
		5/19/2011	< 0.26	1.6 J	4.8 J	< 0.92	< 3.0	NA	NA
		4/18/2012	< 0.22	< 3	< 1.7	< 0.97	< 1.7	NA	NA
		11/6/2013	< 0.28	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
		9/11/2014	< 0.21	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
OB-15B	25-35'	10/12/2004	< 0.50	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
		10/3/2006	< 0.21	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
		4/12/2007	< 0.21	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
		10/16/2007	< 0.19	< 1.1	1.0 B	< 1.1	< 0.94	NA	NA
		5/2/2008	< 0.26	< 1.7	2.6 B	< 1.7	2.1 B	NA	NA
		9/16/2008	< 0.26	1.7 B	< 1.4	< 1.7	< 1.4	NA	NA
		7/6/2009	< 0.23	< 3.0	< 1.7	< 2.4	< 1.7	NA	NA
		10/26/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		6/11/2010	< 0.23	3.2	2.0 B	< 1.4	< 1.9	NA	NA
		5/23/2011	< 0.22	1.2 B	2.0 B	< 0.92	< 0.94	NA	NA
		4/24/2012	< 0.22	1.5 B	< 1.7	1.4 B	< 1.7	NA	NA
		11/20/2013	< 0.28 J	2.9 B	< 2.4	< 1.5	< 2.4	NA	NA
		9/5/2014	< 0.21	< 2.6	1.4 B	< 2.6	< 1.3	NA	NA

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Well ID	Sample Depth (ft bgs)	Sample Date	Benzene	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062 Method)	Dissolved Arsenic (USEPA 7062 Method)
OB-16	5-15'	10/12/2004	< 0.50	7.6	< 3.0	6.3	< 3.0	NA	NA
		9/27/2006	< 0.21	6.2	< 2.6	4.2	< 2.6	NA	NA
		4/10/2007	< 0.21	4.4	< 2.8	3.3	< 2.8	NA	NA
		10/10/2007	< 0.19	8.8	< 0.94	3.6	< 0.94	NA	NA
		5/1/2008	< 0.26	4.6	3.7	< 1.7	1.6 B	NA	NA
		9/11/2008	< 0.26	7.4	< 1.4	2.6 BJ	< 1.4	NA	NA
		7/8/2009	< 0.23	5.1	< 1.7	< 2.4	< 1.7	NA	NA
		10/23/2009	NA	6.1	< 1.7	< 2.4	< 1.7	NA	NA
		10/29/2009	< 0.23	NA	NA	NA	NA	NA	NA
		5/27/2010	< 0.23	7.8	< 1.9	< 1.4	< 1.9	NA	NA
		5/19/2011	< 0.26	9.1	< 3.0	6.0	< 3.0	NA	NA
		4/17/2012	< 0.22	6.9 J	< 1.7	< 3	1.8 B	NA	NA
		11/6/2013	< 0.28	9.9	< 2.4	6.4	< 2.4	NA	NA
		9/10/2014	< 0.21	4.7	1.3 B	< 2.6	1.8 B	12.7	0.8 J
OB-17	3-13'	10/11/2004	< 0.50	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
		9/27/2006	< 0.21	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
		4/10/2007	< 0.21	< 1.5	3.5	< 1.5	< 2.8	NA	NA
		10/10/2007	< 0.19	2.5 B	1.7 B	< 1.1	< 0.94	NA	NA
		5/1/2008	< 0.26	< 1.7	2.3 B	< 1.7	2.4 B	NA	NA
		9/11/2008	< 0.26	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
		7/8/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		10/23/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		5/27/2010	< 0.23	1.9 B	< 1.9	< 1.4	< 1.9	NA	NA
		5/19/2011	< 0.26	< 0.92	< 3.0	< 0.92	< 3.0	NA	NA
		4/17/2012	< 0.22	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
		11/6/2013	< 0.28	1.9 B	< 2.4	< 1.5	< 2.4	NA	NA
		9/3/2014	< 0.21	3.5	< 1.3	< 2.6	< 1.3	NA	NA
OB-18	10-20'	10/11/2004	< 0.50	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
		9/26/2006	< 0.21	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
		4/10/2007	< 0.21	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
		4/10/2007	< 0.21	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
		10/10/2007	< 0.19	< 1.1	1.2 B	< 1.1	1.0 B	NA	NA
		5/1/2008	< 0.26	< 1.7	< 1.4	< 1.7	1.8 B	NA	NA
		9/11/2008	< 0.26	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
		7/8/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		10/23/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		5/27/2010	< 0.23	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
		5/19/2011	< 0.26	< 0.92	< 0.94	< 0.92	< 1.1	NA	NA
		4/17/2012	< 0.22	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
		11/6/2013	< 0.28	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
		9/3/2014	< 0.21	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA

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Well ID	Sample Depth (ft bgs)	Sample Date	Benzene	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062 Method)	Dissolved Arsenic (USEPA 7062 Method)
OB-19	5-20'	10/3/2006	0.55 J	3.1	9.4	< 1.5	< 2.6	NA	NA
		4/9/2007	0.59 J	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
		10/15/2007	< 0.19	1.9 B	1.3 B	< 1.1	1.1 B	NA	NA
		10/15/2007	< 0.19	1.8 B	1.0 B	< 1.1	< 0.94	NA	NA
		4/29/2008	0.56 J	< 1.7	1.4 B	< 1.7	< 1.4	NA	NA
		9/12/2008	0.37 J	4 J	< 1.4	< 1.7	< 1.4	NA	NA
		7/7/2009	1.2	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		10/27/2009	0.39 J	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		6/1/2010	0.29 J	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
		5/20/2011	0.90 J	< 0.92	3.5	< 0.92	1.0 B	NA	NA
		4/25/2012	0.32 J	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
		11/11/2013	< 0.28	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
		9/4/2014	< 0.21	6.0	< 1.3	< 2.6	< 1.3	NA	NA
OB-20A	5-20'	10/4/2006	0.36 J	13.9	< 2.6	13.1	< 2.6	NA	NA
		4/3/2007	0.48 J	24.6	< 2.8	20.8	< 2.8	NA	NA
		10/11/2007	0.36 J	18.6	3	2.4 B	< 0.94	NA	NA
		4/29/2008	< 0.26	3.7	2.1 B	< 1.7	1.8 B	NA	NA
		9/15/2008	< 0.26	7.8	< 1.4	5.3	< 1.4	NA	NA
		7/9/2009	< 0.23	< 3.0	< 1.7	< 3.0	< 1.7	NA	NA
		10/28/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		6/2/2010	< 0.23	7.9	1.9 B	< 1.4	< 1.9	NA	NA
		5/18/2011	< 0.22	< 0.92	5.6	< 0.92	1.0 J	NA	NA
		5/18/2011	< 0.22	< 0.92	2.8 B	< 0.92	< 0.94	NA	NA
		4/27/2012	< 0.22	< 3.0	3.0 J	< 3.0	< 1.7	NA	NA
		11/8/2013	< 0.28	7.2	11.2 J	3.4	< 2.4	NA	NA
		11/8/2013	< 0.28	5.7	< 2.4 J	2.2 B	< 2.4	NA	NA
		9/5/2014	< 0.21	7.7	< 1.3	3.9	< 1.3	NA	NA
		3/19/2015	<0.21	NA	NA	NA	NA	NA	NA
		4/21/2015	<0.24	NA	NA	NA	NA	NA	NA
OB-20B	24-34'	10/4/2006	2.0	1.5 B	3.1	< 1.5	< 2.6	NA	NA
		10/4/2006	1.9	1.9 B	3.5	1.6 B	< 2.6	NA	NA
		4/5/2007	1.4	1.5 B	< 2.8	< 1.5	2.9 B	NA	NA
		4/5/2007	1.5	< 1.5	< 2.8	< 1.5	3.6	NA	NA
		10/11/2007	1.5	1.2 B	1.1 B	< 1.1	1 B	NA	NA
		4/29/2008	1.4	< 1.7	3.8	< 1.7	2.4 B	NA	NA
		9/15/2008	0.90 J	3.8	< 1.4	< 1.7	< 1.4	NA	NA
		7/9/2009	0.83 J	< 3.0	< 1.7	< 2.4	< 1.7	NA	NA
		10/28/2009	0.77 J	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		6/2/2010	1.1	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
		5/18/2011	0.86 J	< 0.92	2.5 B	< 0.92	2.2 B	NA	NA
		4/27/2012	0.66 J	< 0.97	2.8 J	< 0.97	< 1.7	NA	NA
		11/8/2013	0.52 J	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
		9/5/2014	0.37 J	2.7 B	< 1.3	2.9 B	< 1.3	NA	NA
		10/9/2014	0.40 J	3.9	< 1.3	3.1	< 1.3	NA	NA
		10/9/2014	0.40 J	3.4	< 1.3	3.7	< 1.3	NA	NA
		3/19/2015	0.46J	NA	NA	NA	NA	NA	NA
		4/21/2015	0.36J	NA	NA	NA	NA	NA	NA

**Table 13**  
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Well ID	Sample Depth (ft bgs)	Sample Date	Benzene	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062 Method)	Dissolved Arsenic (USEPA 7062 Method)
OB-21	6-21'	10/5/2006	< 0.21	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
		10/5/2006	< 0.21	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
		4/9/2007	< 0.21	10.4	29.2	< 1.5	< 2.8	NA	NA
		10/15/2007	< 0.19	9.0 B	27.0	< 1.1	< 0.94	NA	NA
		4/29/2008	< 0.26	< 1.7	2.1 B	< 1.7	< 1.4	NA	NA
		9/12/2008	< 0.26	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
		7/7/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		7/7/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		10/27/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		6/1/2010	< 0.23	< 1.4	2.5 B	< 1.4	< 1.9	NA	NA
		5/18/2011	< 0.22	< 0.92	2.8 B	< 0.92	< 0.94	NA	NA
		4/24/2012	< 0.22	< 3.0	< 1.7	< 0.97	< 1.7	NA	NA
		11/7/2013	< 0.28 J	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
		9/4/2014	< 0.21	2.9 B	< 1.3	< 2.6	< 1.3	NA	NA
		9/4/2014	< 0.21	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
		4/20/2015	<0.24	NA	NA	NA	NA	NA	NA
OB-22	10-20'	11/30/2006	< 0.21	9.5	19.5	< 1.5	< 2.8	NA	NA
		4/4/2007	< 0.21	5.2	9.1	< 1.5	< 2.8	NA	NA
		5/1/2008	< 0.26	< 1.7	2.3 B	< 1.7	< 1.4	NA	NA
		7/8/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		5/28/2010	< 0.23	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
		5/19/2011	< 0.26	< 0.92	< 0.94	< 0.92	< 1.1	NA	NA
		4/19/2012	< 0.22	NA	NA	NA	NA	NA	NA
OB-23	10-20'	11/28/2006	< 0.21	1.8 B	< 2.8 J	< 1.5	3.0 J	NA	NA
		4/11/2007	< 0.21	< 1.5	24.1	< 1.5	< 2.8	NA	NA
		5/2/2008	< 0.26	< 1.7	2.5 B	< 1.7	< 1.4	NA	NA
		7/8/2009	< 0.23	< 2.4	7.5	< 2.4	< 1.7	NA	NA
		5/28/2010	< 0.23	2.2 B	2.2 B	< 1.4	< 1.9	NA	NA
		5/19/2011	< 0.26	< 0.92	5.5 J	< 0.92	< 3.0	NA	NA
OB-24	5-15'	11/28/2006	< 0.21	< 1.5	2.8 B	< 1.5	< 2.8	NA	NA
		4/11/2007	< 0.21	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
		10/12/2007	< 0.19	1.9 B	1.2 BJ	< 1.1	1.5 BJ	NA	NA
		4/30/2008	< 0.26	1.7 B	1.5 B	< 1.7	< 1.4	NA	NA
		4/30/2008	< 0.26	< 1.7	1.6 B	1.7 B	< 1.4	NA	NA
		9/11/2008	< 0.26	2.5 BJ	< 1.4	< 1.7	< 1.4	NA	NA
		7/8/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		10/26/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		5/28/2010	< 0.23	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
		5/19/2011	< 0.26	< 0.92	4.2 J	< 0.92	< 3.0	NA	NA
		4/18/2012	< 0.22	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
		11/6/2013	< 0.28	< 1.5	< 3.0 B	< 1.5	< 2.4	NA	NA
		11/6/2013	< 0.28	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
		9/3/2014	0.50	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA

**Table 13**  
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Well ID	Sample Depth (ft bgs)	Sample Date	Benzene	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062 Method)	Dissolved Arsenic (USEPA 7062 Method)
OB-25	10-20'	11/30/2006	< 0.21	9.1 J	31.5 J	< 1.5	< 2.8	NA	NA
		11/30/2006	< 0.21	23.1 J	59.3 J	< 1.5	< 2.8	NA	NA
		4/12/2007	< 0.21	7.1	594	< 1.5	< 2.8	NA	NA
		10/12/2007	< 0.19	1.1 B	3.1	< 1.1	1.5 B	NA	NA
		4/29/2008	< 0.26	2.1 B	13.8	< 1.7	< 1.4	NA	NA
		9/18/2008	< 0.26	19.8	45.7	< 1.7	< 1.4	NA	NA
		7/6/2009	< 0.23	8.4 J	19.9	< 2.4	< 1.7	NA	NA
		10/26/2009	< 0.23	< 2.4	4.3	< 2.4	2.0 B	NA	NA
		6/1/2010	< 0.23	1.7 B	53.6	< 1.4	< 1.9	NA	NA
		5/20/2011	< 0.26	< 0.92	4.2	< 0.92	< 0.94	NA	NA
		4/20/2012	< 0.22	2.1 J	17.2	< 0.97	< 1.7	NA	NA
		11/12/2013	< 0.28	9.6 J	40.3	NA	NA	NA	NA
		9/9/2014	< 0.21	< 2.6	3.8	< 2.6	2.2 B	NA	NA
OB-26	9-24'	5/9/2008	< 0.26	< 1.7 B	1.7 B	< 1.7 B	1.5 B	NA	NA
		9/16/2008	< 0.26	2.7 B	< 1.4	< 1.7	< 1.4	NA	NA
		7/2/2009	< 0.23	< 2.4	< 3.0	< 2.4	< 1.7	NA	NA
		10/22/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		5/26/2010	< 0.23	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
		5/17/2011	< 0.26	< 0.92	< 0.94	< 0.92	< 0.94	NA	NA
		4/20/2012	< 0.22	< 0.97	5.0 J	< 0.97	< 1.7	NA	NA
OB-27	24.5-39.5'	6/1/2010	5.9	20.5	< 1.9	2.9 B	< 1.9	NA	NA
		5/18/2011	6.5	NA	NA	NA	NA	NA	NA
		4/25/2012	5.5	21.5	< 1.7	18.0	< 1.7	NA	NA
		11/11/2013	3.5	25.5	< 2.4	5.6	< 2.4	NA	NA
		11/11/2013	3.5	24.5	< 2.4	9.5	< 2.4	NA	NA
		9/10/2014	2.6	23.0	1.4 B	4.5	< 1.3	28	0.3 J
		3/20/2015	2.8	NA	NA	NA	NA	NA	NA
		4/21/2015	3.1	NA	NA	NA	NA	NA	NA
OB-28	3-18'	5/27/2010	< 0.23	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
		5/19/2011	< 0.26	9.8	24.4	< 0.92	4.0 J	NA	NA
		4/17/2012	< 0.22	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
		11/6/2013	< 0.28	< 1.5	< 4.2 B	< 1.5	< 2.4	NA	NA
		9/10/2014	< 0.21	< 2.6	1.7 B	< 2.6	1.5 B	NA	NA
OB-29	18-35'	5/11/2012	< 0.22	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
		11/14/2013	< 0.28 J	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
		9/9/2014	< 0.21	< 2.6	< 1.3	< 2.6	1.6 B	NA	NA
OB-30A	8-18'	5/10/2012	< 0.22	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
OB-30B	21-36'	5/11/2012	< 0.22	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
		11/7/2013	< 0.28	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
		9/4/2014	< 0.21	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
OB-30C	40-50'	5/9/2012	< 0.22	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
		11/7/2013	< 0.28	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
		9/4/2014	< 0.21	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA

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Well ID	Sample Depth (ft bgs)	Sample Date	Benzene	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062 Method)	Dissolved Arsenic (USEPA 7062 Method)
PM AIR SHAFT	50'	4/23/2012	< 0.22	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
		7/11/2012	< 0.24	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
		9/16/2014	< 0.21	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
		4/24/2015	<0.24	NA	NA	NA	NA	NA	NA
	180'	5/7/2008	< 0.26	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
		9/18/2008	<b>26.4</b>	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
		7/10/2009	<b>7.4</b>	< 2.4	< 3.0	< 2.4	< 1.7	NA	NA
		10/29/2009	0.60 J	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		6/4/2010	< 0.23	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
		5/24/2011	<b>2.5</b>	< 0.92	2.5 B	< 0.92	< 0.94	NA	NA
		4/23/2012	< 0.22	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
		7/11/2012	< 0.24	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
		7/11/2012	< 0.24	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
		9/16/2014	<b>6.6</b>	< 2.6	13.3	< 2.6	1.5 B	NA	NA
		4/24/2015	<b>2.3</b>	NA	NA	NA	NA	NA	NA
RW-1	230'	5/7/2008	<b>31.8</b>	< 1.7	<b>6.4</b>	< 1.7	<b>5.4</b>	NA	NA
		9/18/2008	<b>29.1</b>	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
		7/10/2009	<b>7.6</b>	< 2.4	< 3.0	< 2.4	< 1.7	NA	NA
		10/29/2009	<b>31.2</b>	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		6/4/2010	<b>31.0</b>	1.8 B	< 1.9	< 1.4	< 1.9	NA	NA
		5/24/2011	<b>33.2</b>	< 0.92	2.2 B	< 0.92	1.3 B	NA	NA
		4/24/2012	< 0.22	1.0 B	< 1.7	< 0.97	< 1.7	NA	NA
		4/24/2012	< 0.22	< 0.97	1.9 B	< 0.97	< 1.7	NA	NA
		7/11/2012	<b>28.5</b>	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
		9/17/2014	<b>32.9</b>	4.2	3.4 J	4.9	2.2 J	NA	NA
		4/24/2015	<b>7.8</b>	NA	NA	NA	NA	NA	NA
	10-31'	11/1/2004	< 1.0	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
		4/1/2005	< 0.31	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
		4/1/2005	< 0.31	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
		10/9/2006	< 0.21	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
		4/18/2007	< 0.21	< 1.5	3.8	< 1.5	< 2.8	NA	NA
		10/9/2007	< 0.19	< 1.1	2.5 B	< 1.1	< 0.94	NA	NA
		5/6/2008	< 0.26	< 1.7	3.4	< 1.7	1.5 B	NA	NA
		9/18/2008	<b>9.8</b>	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
		7/17/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		10/20/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	58-79'	4/1/2005	< 0.31	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
		10/9/2006	< 0.21	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
		4/18/2007	< 0.21	< 1.5	3.1	< 1.5	< 2.8	NA	NA
		10/10/2007	< 0.19	< 1.1	< 0.94	< 1.1	< 0.94	NA	NA
		5/6/2008	< 0.26	< 1.7	2.0 B	< 1.7	2.2 B	NA	NA
		9/19/2008	<b>8.6</b>	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
		9/19/2008	<b>8.4</b>	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
		7/17/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		10/20/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		10/20/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA

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Well ID	Sample Depth (ft bgs)	Sample Date	Benzene	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062 Method)	Dissolved Arsenic (USEPA 7062 Method)
RW-1	64-74'	6/30/2010	< 0.23	4.5	< 1.9	2.2 B	< 1.9	NA	NA
		5/26/2011	< 0.22	4.0	< 0.94	3.2	< 3.0	NA	NA
		4/17/2012	< 0.22	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	97-118'	4/1/2005	< 0.31	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
		10/10/2006	< 0.21	< 1.5	< 2.6 J	< 1.5	4.5 J	NA	NA
		4/18/2007	< 0.21	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
		10/10/2007	< 0.19	< 1.1	< 0.94	< 1.1	< 0.94	NA	NA
		5/7/2008	< 0.26	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
		5/7/2008	< 0.26	< 1.7	1.9 B	< 1.7	2.6 B	NA	NA
		9/19/2008	2.0	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
		7/17/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		10/20/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	125-151'	3/30/2005	< 0.31	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
		10/10/2006	< 0.21	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
		4/18/2007	< 0.21	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
		10/10/2007	< 0.19	< 1.1	1.2 B	< 1.1	< 0.94	NA	NA
		5/7/2008	< 0.26	< 1.7	2.1 B	< 1.7	2.2 B	NA	NA
		9/22/2008	6.2	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
		7/17/2009	< 0.23	< 2.4	2.3 B	< 2.4	< 1.7	NA	NA
		10/20/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	131-141'	6/30/2010	< 0.23	< 1.4	< 1.9	2.5 B	4.9	NA	NA
		5/26/2011	< 0.22	2.3 B	< 0.94	1.0 B	< 0.94	NA	NA
		4/17/2012	< 0.22	3 J	< 1.7	< 3	< 1.7	NA	NA
		6/26/2012	NA	NA	NA	NA	NA	NA	NA
RW-2	19-20'	10/26/2004	< 1.0	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
		10/4/2006	< 0.21	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
		4/10/2007	< 0.21	< 1.5	4.1	< 1.5	< 2.8	NA	NA
		10/15/2007	< 0.19	< 1.1	1.2 B	< 1.1	< 0.94	NA	NA
		5/1/2008	< 0.26	< 1.7	4.3	< 1.7	2.9 B	NA	NA
		9/16/2008	7.4	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
		7/10/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		7/10/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		10/26/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		10/26/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	102-133	10/26/2004	< 1.0	< 5.0	7.3	< 5.0	< 3.0	NA	NA
		10/4/2006	< 0.21	< 1.5	< 2.6	< 1.5	3.2	NA	NA
		4/10/2007	< 0.21	< 1.5	11.2	< 1.5	< 2.8	NA	NA
		10/15/2007	< 0.19	< 1.1 J	< 0.94	1.1 BJ	< 0.94	NA	NA
		5/1/2008	< 0.26	< 1.7	5.4	< 1.7	2.1 B	NA	NA
		9/17/2008	43.8	1.7 B	< 1.4	< 1.7	< 1.4	NA	NA
		7/13/2009	< 0.23	< 2.4	< 3.0	< 2.4	< 1.7	NA	NA
		10/27/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA

**Table 13**  
**Groundwater Monitoring Results: 2004-2014**

**Site-Related Groundwater Remedial Investigation Report**  
**Ringwood Mines/Landfill Superfund Site**  
**Ringwood, New Jersey**

Well ID	Sample Depth (ft bgs)	Sample Date	Benzene	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062 Method)	Dissolved Arsenic (USEPA 7062 Method)
RW-2	161-192'	10/27/2004	< 1.0	< 5.0	<b>64.6</b>	< 5.0	< 3.0	NA	NA
		4/16/2007	< 0.21	< 1.5	<b>14.0</b>	< 1.5	< 2.8	NA	NA
		10/16/2007	< 0.19	< 1.1	1.4 B	< 1.1	< 0.94	NA	NA
		7/13/2009	< 0.23	< 2.4	< 3.0	< 2.4	< 1.7	NA	NA
		10/27/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	278-309'	10/27/2004	< 1.0	< 5.0	<b>7.6 J</b>	< 5.0	< 3.0	NA	NA
		10/27/2004	< 1.0	< 5.0	<b>26.4 J</b>	< 5.0	3.2	NA	NA
		10/6/2006	< 0.21	< 1.5	2.8 B	< 1.5	3.6	NA	NA
		4/17/2007	< 0.21	< 1.5	<b>5.9</b>	< 1.5	<b>5.2</b>	NA	NA
		10/16/2007	< 0.19	< 1.1	3.2	< 1.1	< 0.94	NA	NA
		9/11/2008	< 6	< 1.7	<b>21.2</b>	< 1.7	< 1.4	NA	NA
		7/13/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		10/27/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		6/29/2010	< 0.23	3.0	< 1.9	<b>3.7</b>	< 1.9	NA	NA
		5/24/2011	< 0.22	< 0.92	< 0.94	< 0.92	< 0.94	NA	NA
		5/8/2012	< 0.22	< 0.97	< 1.7	1.3 J	< 1.7	NA	NA
		11/19/2013	< 0.28	<b>3.8</b>	< 2.4	< 1.5	< 2.4	NA	NA
		9/26/2014	< 0.21	<b>5.2</b>	< 1.3	<b>4.1</b>	< 1.3	NA	NA
	441-472'	10/28/2004	< 1.0	<b>6.8</b>	<b>45.5</b>	< 5.0	<b>9.3</b>	NA	NA
		4/17/2007	< 0.21	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
		10/17/2007	< 0.19	1.3 B	3.3	< 1.1	< 0.94	NA	NA
		5/5/2008	< 0.26	< 1.7	<b>22.2</b>	< 1.7	3.9	NA	NA
		7/14/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		10/28/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		6/29/2010	< 0.23	NA	NA	NA	NA	NA	NA
		6/3/2011	0.24 J	< 3.0	< 3.0	2.2 J	< 3.0	NA	NA
		5/10/2012	0.23 J	2.5 B	< 1.7	< 3.0	< 1.7	NA	NA
		11/19/2013	< 0.28	< 1.5	< 2.4	<b>3.4</b>	< 2.4	NA	NA
		9/26/2014	< 0.21	<b>8.3</b>	<b>5.8</b>	<b>7.2</b>	1.8 B	NA	NA
RW-3	62-100'	10/29/2004	< 1.0	< 5.0	< 3.0	< 5.0	< 3.0	NA	NA
		9/29/2006	< 0.21	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
		4/5/2007	< 0.21	< 1.5	3.0	< 1.5	< 2.8	NA	NA
		10/12/2007	< 0.19	< 1.1	< 0.94	< 1.1	< 0.94	NA	NA
		4/30/2008	< 0.26	< 1.7	4.7	< 1.7	2.3 B	NA	NA
		9/8/2008	< 0.26	< 1.7	1.6 B	< 1.7	< 1.4	NA	NA
		7/6/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		10/19/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		6/28/2010	< 0.23	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
		5/25/2011	< 0.22	< 0.92	< 0.94	< 0.92	< 0.94	NA	NA
		4/27/2012	< 0.22	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
		11/11/2013	< 0.28	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
		9/15/2014	< 0.21	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA

**Table 13**  
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**Site-Related Groundwater Remedial Investigation Report**  
**Ringwood Mines/Landfill Superfund Site**  
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Well ID	Sample Depth (ft bgs)	Sample Date	Benzene	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062 Method)	Dissolved Arsenic (USEPA 7062 Method)
RW-3D	140-165'	6/9/2010	< 0.23	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
		6/9/2010	< 0.23	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
		5/24/2011	< 0.22	< 0.92	1.5 B	< 0.92	< 0.94	NA	NA
	170-181'	6/9/2010	< 0.23	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
		5/24/2011	< 0.22	< 0.92	1.9 B	< 0.92	< 0.94	NA	NA
		5/24/2011	< 0.22	1.6 B	1.5 B	< 0.92	< 0.94	NA	NA
	175-180'	4/30/2012	< 0.22	10.4	< 1.7	5.4	< 1.7	NA	NA
		11/12/2013	< 0.28	21.4	< 2.4	23.1	< 2.4	NA	NA
		9/12/2014	1.1	13.6 J	< 1.3	18.7 J	< 4.5 B	19.2	18
RW-3DS	155-160'	4/30/2012	< 0.22	7.4	< 1.7	3.3	< 1.7	NA	NA
		11/12/2013	< 0.28	< 5.9 B	3.5	8.1 J	< 3.0 B	NA	NA
		9/11/2014	< 0.21	9.6	< 1.3	11.8	< 1.3	NA	NA
RW-4	56-77'	10/22/2004	< 0.31	< 5.0	4.4	< 5.0	< 3.0	NA	NA
		10/2/2006	< 0.21	< 1.5	6.3	< 1.5	< 2.6	NA	NA
		4/6/2007	< 0.21	< 1.5	5.0	< 1.5	< 2.8	NA	NA
		10/11/2007	< 0.19	< 1.1	1.6 B	< 1.1	< 0.94	NA	NA
		4/28/2008	< 0.26	< 1.7	3.4	< 1.7	< 1.4	NA	NA
		9/15/2008	14.3	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
		6/30/2009	< 0.23	< 2.4	3.4 J	< 2.4	< 1.7	NA	NA
		10/21/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	108-129'	10/22/2004	< 0.31	< 5.0	18.6	< 5.0	< 3.0	NA	NA
		10/2/2006	< 0.21	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
		4/9/2007	< 0.21	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
		10/11/2007	< 0.19	< 1.1	< 0.94	1.5 B	< 0.94	NA	NA
		4/29/2008	< 0.26	< 1.7	3.1	< 1.7	< 1.4	NA	NA
		9/16/2008	3.3	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
		6/30/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		10/22/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
RW-5	328-349'	10/25/2004	< 0.31	< 5.0	12.6	< 5.0	< 3.0	NA	NA
		10/3/2006	< 0.21	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
		4/9/2007	< 0.21	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
		10/11/2007	< 0.19	< 1.1	2.1 B	< 1.1	< 0.94	NA	NA
		4/29/2008	< 0.26	< 1.7	2.5 B	< 1.7	1.8 B	NA	NA
		9/9/2008	0.30 J	< 1.7	1.8 B	2.7 B	< 1.4	NA	NA
		7/2/2009	< 0.23	< 2.4	< 3.0	< 2.4	< 1.7	NA	NA
		10/23/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		6/7/2011	< 0.05	< 0.92	1.3 B	< 0.92	1.4 B	NA	NA
		4/25/2012	< 0.22	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
		11/11/2013	< 0.28	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
		9/9/2014	< 0.21	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA

**Table 13**  
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Well ID	Sample Depth (ft bgs)	Sample Date	Benzene	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062 Method)	Dissolved Arsenic (USEPA 7062 Method)
RW-4	388-409'	10/25/2004	< 0.31	< 5.0	<b>12.5</b>	< 5.0	3.0	NA	NA
		10/3/2006	< 0.21	< 1.5	3.7	< 1.5	< 2.6	NA	NA
		4/9/2007	< 0.21	< 1.5	3.0 B	< 1.5	< 2.8	NA	NA
		10/11/2007	< 0.19	< 1.1	2.4 B	< 1.1	< 0.94	NA	NA
		4/29/2008	< 0.26	< 1.7	3.3	< 1.7	< 1.4	NA	NA
		9/10/2008	< 0.26	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
		7/2/2009	< 0.23	< 2.4	< 3.0	< 2.4	< 1.7	NA	NA
		10/23/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		6/8/2010	< 0.23	< 1.4	3.2	< 1.4	< 1.9	NA	NA
		6/8/2010	< 0.23	< 1.4	2.7 B	< 1.4	< 1.9	NA	NA
		6/25/2010	< 0.23	1.8 B	< 1.9	<b>5.4</b>	< 1.9	NA	NA
		6/25/2010	< 0.23	2.0 B	2.0 B	2.2 B	< 1.9	NA	NA
		5/25/2011	< 0.22	< 3.0	< 3.0	< 0.92	< 3.0	NA	NA
		4/26/2012	< 0.22	< 3.0	< 1.7	< 0.97	< 1.7	NA	NA
		11/11/2013	< 0.28	<b>3.6</b>	<b>44.6</b>	< 1.5	< 2.4	NA	NA
		9/10/2014	< 0.21	<b>9.6</b>	<b>13.8</b>	< 2.6	2.6 B	NA	NA
RW-4A	62-72'	6/7/2010	< 0.23	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
		6/25/2010	< 0.23	1.5 B	< 1.9	< 1.4	< 1.9	NA	NA
		5/25/2011	< 0.22	< 0.92	< 3.0	< 0.92	< 3.0	NA	NA
		4/25/2012	< 0.22	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
		11/8/2013	< 0.28	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
		9/10/2014	< 0.21	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
	113-123'	6/8/2010	< 0.23	3.0	< 1.9	3.0	< 1.9	NA	NA
		6/25/2010	< 0.23	2.6 B	< 1.9	2.0 B	< 1.9	NA	NA
		5/25/2011	< 0.22	< 0.92	< 0.94	< 0.92	< 3.0	NA	NA
		4/25/2012	< 0.22	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
		11/8/2013	< 0.28	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
		9/10/2014	< 0.21	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
RW-5	40-51'	9/27/2006	1.0	1.7 B	<b>68.4</b>	< 1.5	< 2.6	NA	NA
		4/13/2007	<b>1.9</b>	< 1.5	<b>44.3</b>	< 0.94	< 2.8	NA	NA
	64-76'	5/16/2006	<b>3.4</b>	<b>17.7</b>	<b>39.8</b>	NA	NA	NA	NA
		9/29/2006	< 0.21	< 1.5	<b>24.7</b>	< 1.5	< 7.8	NA	NA
		4/12/2007	<b>1.5</b>	< 1.5	<b>13.9</b>	NA	NA	NA	NA

**Table 13**  
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Well ID	Sample Depth (ft bgs)	Sample Date	Benzene	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062 Method)	Dissolved Arsenic (USEPA 7062 Method)
RW-5	99-120'	5/17/2006	3.0	< 3.1	3.3	< 3.1	< 2.6	NA	NA
		10/5/2006	1.8	4.7	32.7	< 1.5	< 2.6	NA	NA
		4/12/2007	2.6	< 1.5	7.0	< 1.5	4.6	NA	NA
		10/15/2007	1.8	< 1.1	1.5 B	< 1.1	1.0 B	NA	NA
		5/2/2008	0.89 J	4.1	< 1.4	< 1.7	< 1.4	NA	NA
		9/17/2008	0.41 J	2.4 B	< 1.4	1.8 B	< 1.4	NA	NA
		9/17/2008	0.42 J	2.3 B	< 1.4	< 1.7	< 1.4	NA	NA
		7/7/2009	0.26 J	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		10/27/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		6/2/2010	NA	2.1 B	< 1.9	< 1.4	< 1.9	NA	NA
		6/4/2010	0.24 J	NA	NA	NA	NA	NA	NA
		5/20/2011	< 0.26	1.1 B	< 0.94	< 0.92	1.3 B	NA	NA
		4/26/2012	< 0.22	< 3.0	1.9 J	< 3.0	< 1.7	NA	NA
		11/14/2013	< 0.28 J	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
		9/4/2014	< 0.21	9.4	4.7	7.9	1.4 B	NA	NA
RW-5A	54-74'	10/15/2007	< 0.19	< 1.1	1.9 B	< 1.1	< 0.94	NA	NA
		4/29/2008	< 0.26	8.6	2.9 B	11.8	2.5 B	NA	NA
		9/12/2008	< 0.26	10	2.2 BJ	9.7	< 1.4	NA	NA
		7/7/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		10/28/2009	< 0.23	3.5	< 1.7	< 2.4	< 1.7	NA	NA
		6/1/2010	< 0.23	2.6 B	< 1.9	2.7 B	< 1.9	NA	NA
		6/1/2010	< 0.23	3.6	< 1.9	2.1 B	< 1.9	NA	NA
		5/18/2011	< 0.22	2.2 B	1.6 J	1.1 B	< 0.94	NA	NA
		4/25/2012	< 0.22	4.9 J	< 1.7	5.9 J	< 1.7	NA	NA
		11/8/2013	< 0.28	6.3	< 2.4	6.7	< 2.4	NA	NA
		9/10/2014	< 0.21	7.6	2.2 B	4.7	1.8 B	10.5	1 J
RW-6	53-64'	5/11/2006	2.9	< 8.0	3.2	< 8.0	< 3.0	NA	NA
		9/27/2006	3.0	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
		4/2/2007	2.6	1.7 B	4.5	< 1.5	2.9 B	NA	NA
	70-81'	5/11/2006	2.6	< 8.0	< 3.0	< 8.0	< 3.0	NA	NA
		9/27/2006	2.6	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
		4/3/2007	1.9	< 1.5	32.3 J	< 1.5	< 2.8	NA	NA

**Table 13**  
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Well ID	Sample Depth (ft bgs)	Sample Date	Benzene	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062 Method)	Dissolved Arsenic (USEPA 7062 Method)
RW-6	98-120'	10/10/2006	4.0	< 1.5	<b>6.9 J</b>	< 1.5	3.1 J	NA	NA
		4/6/2007	2.7	< 1.5	4.6	< 1.5	< 2.8	NA	NA
		10/11/2007	2.6	2.5 B	< 0.94	1.2 B	1.3 B	NA	NA
		5/2/2008	1.7	<b>3.8</b>	1.5 B	2.5 B	< 1.4	NA	NA
		9/15/2008	2.1	2.4 B	< 1.4	2.1 B	< 1.4	NA	NA
		7/9/2009	2.0	<b>4.1 J</b>	< 1.7	< 2.4	< 1.7	NA	NA
		10/28/2009	1.5	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		6/2/2010	NA	2.1 B	< 1.9	< 1.4	< 1.9	NA	NA
		6/4/2010	1.5	NA	NA	NA	NA	NA	NA
		5/18/2011	1.6	< 0.92	1.8 J	< 0.92	2.2 B	NA	NA
		4/27/2012	0.74 J	< 3.0	2.3 J	< 0.97	2.6 J	NA	NA
		11/18/2013	2.3	<b>3.6</b>	4.9	<b>3.2</b>	3.6	NA	NA
		9/5/2014	2.1	2.6 B	1.3 B	< 2.6	< 1.3	NA	NA
		10/9/2014	<b>15.7</b>	3.6	< 1.3	3.3	< 1.3	NA	NA
		3/19/2015	344	NA	NA	NA	NA	NA	NA
		4/22/2015	2.2	NA	NA	NA	NA	NA	NA
RW-6A	58-78'	10/16/2007	<b>5.5</b>	< 1.1	< 0.94	< 1.1	< 0.94	NA	NA
		5/2/2008	1.7	2.9 B	2.8 B	< 1.7	1.8 B	NA	NA
		9/15/2008	2.9	1.9 B	< 1.4	1.7 B	< 1.4	NA	NA
		7/9/2009	1.3	< 3.0	< 1.7	< 2.4	< 1.7	NA	NA
		10/28/2009	2.4	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		6/2/2010	1.9	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
		5/18/2011	1.5	< 0.92	3.1	< 0.92	2.4 B	NA	NA
		4/27/2012	2.0	< 0.97	1.8 J	< 0.97	< 1.7	NA	NA
		11/8/2013	<b>15.0</b>	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
		9/5/2014	88.1	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
		10/9/2014	6.8	< 5.1	< 1.3	< 5.1	< 1.3	NA	NA
		3/19/2015	13.3	NA	NA	NA	NA	NA	NA
		4/21/2015	8.7	NA	NA	NA	NA	NA	NA
RW-7	34-45'	5/9/2006	< 0.21	< 8.0	< 3.0 J	< 8.0	< 3.0 J	NA	NA
		9/26/2006	< 0.21	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
		4/3/2007	< 0.21	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
	40-62'	5/9/2006	< 0.21	< 8.0	< 3.0 J	< 8.0	< 3.0 J	NA	NA
		9/26/2006	< 0.21	< 1.5 J	< 2.6	1.8 BJ	< 2.6	NA	NA
		4/4/2007	< 0.21	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
		10/15/2007	< 0.19	< 1.1	< 0.94	< 1.1	< 0.94	NA	NA
		5/5/2008	< 0.26	< 1.7	1.5 B	< 1.7	< 1.4	NA	NA
		9/12/2008	< 0.26	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
		7/7/2009	< 0.23	< 2.4	<b>5.1</b>	< 2.4	< 1.7	NA	NA
		10/27/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		10/27/2009	0.41 J	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		6/1/2010	< 0.23	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
		5/18/2011	< 0.22	< 0.92	<b>5.9</b>	< 0.92	1.1 J	NA	NA
		4/24/2012	< 0.22	1.1 B	< 1.7	< 0.97	< 1.7	NA	NA
		11/7/2013	< 0.28	< 1.5	< 2.4	< 1.5	< 4.1 B	NA	NA
		9/4/2014	< 0.21	3.6	2.9 B	3.2	< 1.3	NA	NA
		4/20/2015	<0.24	NA	NA	NA	NA	NA	NA

**Table 13**  
**Groundwater Monitoring Results: 2004-2014**

**Site-Related Groundwater Remedial Investigation Report**  
**Ringwood Mines/Landfill Superfund Site**  
**Ringwood, New Jersey**

Well ID	Sample Depth (ft bgs)	Sample Date	Benzene	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062 Method)	Dissolved Arsenic (USEPA 7062 Method)
RW-7	80-101'	5/10/2006	< 0.21	< 8.0	< 3.0	< 8.0	< 3.0	NA	NA
		9/28/2006	< 0.21	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
		4/3/2007	< 0.21	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
	103-120'	5/10/2006	< 0.21	< 8.0	< 3.0	< 8.0	3.8	NA	NA
		9/28/2006	< 0.21	< 1.5	< 2.6	< 1.5	< 2.6	NA	NA
		4/4/2007	< 0.21	< 1.5	< 2.8	< 1.5	< 2.8	NA	NA
RW-8	42-62'	7/31/2008	0.62 J	< 1.7	4.0	< 1.7	1.9 B	NA	NA
		11/4/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		7/7/2009	< 0.23	< 2.4	17.9	< 2.4	5.0	NA	NA
	158-178'	7/21/2008	< 0.26	4.3	< 1.4	3.2	< 1.4	NA	NA
		7/7/2009	< 0.23	< 2.4	6.0	< 2.4	< 1.7	NA	NA
		11/4/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	163-173'	6/23/2010	< 0.23	NA	NA	NA	NA	NA	NA
		6/24/2010	NA	NA	NA	NA	NA	NA	NA
		6/25/2010	NA	2.1 B	< 1.9	NA	NA	NA	NA
		5/31/2011	< 0.22	2.1 B	< 0.94	1.1 B	< 0.94	NA	NA
		6/1/2011	NA	NA	NA	NA	NA	NA	NA
		5/3/2012	< 0.22	2.0 J	< 1.7	1.7 J	< 1.7	NA	NA
		11/15/2013	0.34 J	2.4 B	< 3.0 B	2.0 B	< 2.4	NA	NA
		9/22/2014	< 0.21	4.2	< 1.3	5.2	< 1.3	NA	NA
	199-219'	7/22/2008	0.38 J	2.5 B	< 1.4	3.6	< 1.4	NA	NA
		7/7/2009	< 0.23	< 2.4	< 3.0	< 2.4	< 1.7	NA	NA
		11/4/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	204-214'	6/23/2010	< 0.23	NA	NA	NA	NA	NA	NA
		6/25/2010	NA	5.9	< 1.9	NA	NA	NA	NA
		6/1/2011	< 0.22	5.1	< 0.94	NA	NA	NA	NA
		11/14/2013	2.2 J	1.5 B	< 2.4	NA	NA	NA	NA
		11/15/2013	NA	NA	NA	< 1.5	< 2.4	NA	NA
		9/23/2014	0.58	3.6	2.3 B	4.2	< 1.3	NA	NA
RW-9	20-40'	7/30/2008	7.0	< 1.7	5.2	< 1.7	2.1 B	NA	NA
		7/15/2009	< 0.23	< 2.4	< 3.0	< 2.4	< 1.7	NA	NA
		11/2/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	80-100'	7/23/2008	0.93 J	1.7 BJ	< 1.4	< 1.7	< 1.4	NA	NA
		7/23/2008	1.1	2.1 BJ	< 1.4	2.0 B	< 1.4	NA	NA
		7/15/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		11/2/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	134-154'	7/23/2008	0.70 J	< 1.7 J	< 1.4	2.1 BJ	< 1.4	NA	NA
		7/16/2009	< 0.23	< 2.4	6.4 J	< 2.4	< 1.7	NA	NA
		7/16/2009	< 0.23	< 2.4	6.4	< 2.4	< 1.7	NA	NA
		11/2/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		11/20/2013	< 0.28 J	NA	NA	NA	NA	NA	NA
	201-221'	7/24/2008	1.5	< 1.7	< 1.4	2.4 B	< 1.4	NA	NA
		7/16/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		11/3/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA

**Table 13**  
**Groundwater Monitoring Results: 2004-2014**

**Site-Related Groundwater Remedial Investigation Report**  
**Ringwood Mines/Landfill Superfund Site**  
**Ringwood, New Jersey**

Well ID	Sample Depth (ft bgs)	Sample Date	Benzene	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062 Method)	Dissolved Arsenic (USEPA 7062 Method)
RW-9	206-216'	6/23/2010	< 0.23	NA	NA	NA	NA	NA	NA
		6/25/2010	NA	NA	NA	NA	NA	NA	NA
		6/28/2010	NA	<b>4.6 J</b>	< 1.9	NA	NA	NA	NA
		5/26/2011	< 0.22	NA	NA	NA	NA	NA	NA
		5/27/2011	NA	<b>3.3</b>	< 0.94	NA	NA	NA	NA
		4/20/2012	< 0.22	< 3.0	< 1.7	< 0.97	< 1.7	NA	NA
		11/20/2013	< 0.28 J	2.2 B	3.0	< 1.5	< 2.4	NA	NA
		9/25/2014	< 0.21	<b>7.3</b>	< 1.3	<b>8.9</b>	< 1.3	NA	NA
RW-9A	85-95'	6/23/2010	0.33 J	NA	NA	NA	NA	NA	NA
		6/1/2011	< 0.22	NA	NA	NA	NA	NA	NA
		4/20/2012	0.23 J	2.8 J	< 1.7	2.5 J	< 1.7	NA	NA
		11/20/2013	< 0.28 J	<b>3.4</b>	< 2.4	NA	NA	NA	NA
		9/23/2014	< 0.21	<b>5.3</b>	< 1.3	<b>3.7</b>	< 1.3	NA	NA
RW-10	22-42'	7/8/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		10/29/2009	< 0.23	< 2.4	2.2 B	< 2.4	< 1.7	NA	NA
	46-66'	7/25/2008	< 0.26	2.2 B	2.8 B	2.2 B	1.6 B	NA	NA
		7/9/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		10/29/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	70-90'	7/28/2008	0.26 J	2.4 B	<b>7.3</b>	< 1.7	1.6 B	NA	NA
		7/9/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		10/29/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
	115-135'	7/28/2008	< 0.26	2.0 B	<b>6.0</b>	< 1.7	1.4 B	NA	NA
		7/9/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		10/29/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		6/23/2010	< 0.23	NA	NA	NA	NA	NA	NA
		6/24/2010	NA	NA	NA	NA	NA	NA	NA
		6/25/2010	NA	<b>4.3</b>	< 1.9	NA	NA	NA	NA
		5/31/2011	< 0.22	<b>4.8</b>	2.5 B	NA	NA	NA	NA
		6/1/2011	NA	NA	NA	<b>4.1</b>	2.3 B	NA	NA
		4/19/2012	< 0.22	<b>3.7 J</b>	< 1.7	<b>3.6 J</b>	< 1.7	NA	NA
		11/15/2013	< 0.28 J	<b>9.5</b>	5.0 J	<b>8.0</b>	<b>5.1 J</b>	NA	NA
		9/17/2014	< 0.21	<b>8.2</b>	<b>6.3</b>	<b>9.1</b>	< 3.0 B	<b>8.6</b>	<b>8.5</b>
	180-200'	7/29/2008	0.57 J	< 1.7	< 1.4	< 1.7	< 1.4	NA	NA
		7/9/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		10/30/2009	< 0.23	< 2.4	<b>6.0</b>	NA	NA	NA	NA
		10/30/2009	< 0.23	< 2.4	<b>7.0</b>	< 2.4	< 1.7	NA	NA
		NA	NA	NA	< 2.4	< 1.7	NA	NA	NA
		6/9/2010	< 0.23	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
		6/23/2010	< 0.23	NA	NA	NA	NA	NA	NA
		6/25/2010	NA	2.2 B	< 1.9	NA	NA	NA	NA
		6/28/2010	NA	NA	NA	< 1.4	< 1.9	NA	NA
		5/31/2011	< 0.22	< 0.92	1.0 B	< 0.92	1.4 B	NA	NA
		4/18/2012	< 0.22	<b>3.6 J</b>	< 1.7	<b>3.6 J</b>	< 1.7	NA	NA
		11/13/2013	< 0.28	<b>7.9</b>	< 4.2 B	<b>6.6</b>	< 3.2 B	NA	NA
		9/17/2014	< 0.21	<b>7.9</b>	3.5	<b>9.7</b>	2.5 B	NA	NA

**Table 13**  
**Groundwater Monitoring Results: 2004-2014**

**Site-Related Groundwater Remedial Investigation Report**  
**Ringwood Mines/Landfill Superfund Site**  
**Ringwood, New Jersey**

Well ID	Sample Depth (ft bgs)	Sample Date	Benzene	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062 Method)	Dissolved Arsenic (USEPA 7062 Method)
RW-10A	51-61'	6/2/2011	< 0.22	< 0.92	< 3.0	< 0.92	< 0.94	NA	NA
		4/18/2012	< 0.22	< 3	< 1.7	< 3	< 1.7	NA	NA
		11/15/2013	< 0.28 J	2.1 B	< 3.1 B	NA	NA	NA	NA
		9/18/2014	< 0.21	< 2.6	< 3.0 B	< 2.6	< 3.0 B	NA	NA
	75-85'	6/9/2010	< 0.23	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
		6/23/2010	< 0.23	NA	NA	NA	NA	NA	NA
		6/28/2010	NA	< 1.4	4.0 J	< 1.4	< 1.9	NA	NA
		6/2/2011	< 0.22	< 0.92	< 3.0	< 0.92	< 0.94	NA	NA
		4/18/2012	< 0.22	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
		4/18/2012	< 0.22	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
RW-11	100-125'	5/7/2012	NA	NA	NA	NA	NA	NA	NA
		11/14/2013	< 0.28 J	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
	142-167'	9/18/2014	< 0.21	< 2.6	3.0	< 2.6	< 3.0 B	NA	NA
		6/7/2010	< 0.23	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
	221-246'	5/26/2011	< 0.22	< 0.92	< 3.0	< 0.92	< 3.0	NA	NA
		6/8/2010	< 0.23	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
RW-11D	262-267'	5/25/2011	< 0.22	< 0.92	< 3.0	< 0.92	< 0.94	NA	NA
		5/1/2012	< 0.22	NA	NA	NA	NA	NA	NA
		11/14/2013	0.56 J	< 1.5	3.3	< 1.5	< 2.4	NA	NA
RW-11S	236-241'	9/15/2014	2.0	< 3.0 B	< 1.3	< 2.6	< 1.3	NA	NA
		5/1/2012	< 0.22	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
		11/13/2013	< 0.28	< 1.5	< 2.4	< 1.5	< 2.4	NA	NA
		9/12/2014	< 0.21	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
RW-12	50-70'	9/12/2014	< 0.21	< 2.6	< 3.0 B	2.6 B	< 3.0 B	NA	NA
		5/10/2012	< 0.22	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
	96-116'	9/19/2014	< 0.21	< 2.6	< 3.0 B	2.6 B	< 3.0 B	NA	NA
		5/10/2012	< 0.22	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
RW-13	125-148'	5/11/2012	< 0.22	< 0.97	< 1.7	< 0.97	< 1.7	NA	NA
		9/19/2014	< 0.21	< 2.6	< 3.0 B	< 2.6	< 3.0 B	NA	NA
		71-91'	9/9/2014	< 0.21	6.3	3.7	4.9	3.7	NA
	100-120'	9/16/2014	< 0.21	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
		150-170'	9/16/2014	< 0.21	< 2.6	1.7 B	2.9 B	< 1.3	NA

**Table 13**  
**Groundwater Monitoring Results: 2004-2014**

**Site-Related Groundwater Remedial Investigation Report**  
**Ringwood Mines/Landfill Superfund Site**  
**Ringwood, New Jersey**

Well ID	Sample Depth (ft bgs)	Sample Date	Benzene	Total Arsenic	Total Lead	Dissolved Arsenic	Dissolved Lead	Total Arsenic (USEPA 7062 Method)	Dissolved Arsenic (USEPA 7062 Method)
SC-01	64.4-70.9'	10/5/2006	< 0.21	< 1.5	< 2.6	1.7 B	< 2.6	NA	NA
		4/11/2007	<b>1.4</b>	< 1.5	<b>6.3</b>	< 1.5	< 2.8	NA	NA
		10/16/2007	<b>1.5</b>	< 1.1	<b>8.8</b>	< 1.1	1.6 B	NA	NA
		4/30/2008	0.93 J	< 1.7	<b>6.6</b>	< 1.7	1.9 B	NA	NA
		4/30/2008	<b>1.1</b>	< 1.7	<b>5.4</b>	< 1.7	< 1.4	NA	NA
		9/17/2008	0.81 J	< 1.7	<b>6.2</b>	< 1.7	< 1.4	NA	NA
		7/9/2009	0.94 J	< 2.4	<b>7.2 J</b>	< 2.4	< 3.0	NA	NA
		10/28/2009	0.53 J	< 2.4	<b>9.9</b>	< 2.4	< 1.7	NA	NA
		6/2/2010	<b>1.5</b>	< 1.4	<b>6.2</b>	< 1.4	< 1.9	NA	NA
		5/18/2011	0.63 J	< 0.92	<b>5.6</b>	< 0.92	1.5 J	NA	NA
		4/27/2012	<b>1.2</b>	< 0.97	<b>9.4</b>	< 0.97	< 1.7	NA	NA
		11/11/2013	<b>1.6</b>	< 1.5	<b>8.6</b>	< 1.5	< 2.4	NA	NA
		9/5/2014	<b>56.0</b>	< 2.6	< 1.3	< 2.6	< 1.3	NA	NA
		10/9/2014	<b>1.6</b>	< 2.6	2.5 B	< 2.6	< 1.3	NA	NA
		3/19/2015	<b>150</b>	NA	NA	NA	NA	NA	NA
		4/22/2015	<b>1.8</b>	NA	NA	NA	NA	NA	NA
SC-02	47-67'	5/5/2008	< 0.26	< 1.7	2.8 B	< 1.7	< 1.4	NA	NA
		9/17/2008	< 0.26	2.1 B	< 1.4	< 1.7	< 1.4	NA	NA
		6/30/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		10/20/2009	< 0.23	< 2.4	< 1.7	< 2.4	< 1.7	NA	NA
		5/25/2010	< 0.23	< 1.4	< 1.9	< 1.4	< 1.9	NA	NA
		5/16/2011	< 0.26	1.4 B	<b>20.0</b>	< 0.92	< 0.94	NA	NA
		4/19/2012	< 0.22	< 0.97	2.9 J	< 0.97	< 1.7	NA	NA
		11/15/2013	< 0.28 J	< 1.5	< 4.0 B	< 1.5	< 2.4	NA	NA
		9/15/2014	< 0.21	< 3.0 B	< 1.3	<b>3.1 J</b>	< 1.3	NA	NA

**Notes:**

Results for benzene, lead, and arsenic are presented in this table. Results for all contaminants are presented in Appendix F. Results are presented in µg/L unless otherwise noted.

<sup>1</sup> GWQS, Class IIA, as specified in New Jersey Administrative Code 7:9-6, current 2005 and interim criteria.  
Bold values indicate value is above the GWQS.

Shaded values indicate value is above the USEPA MCL.

Bold and shaded values indicate value is above the GWQS and the USEPA MCL.

Italicized values indicate detection limit is above the GWQS standard.

< = not detected

B (inorganic) = estimated result is between the detection limit and quantification limit

B (organic) = analyte found in associated method blank

ft bgs = feet below ground surface

GWQS = Groundwater Quality Standard

J = estimated result

MCL = maximum concentration limit

NA = not analyzed or not available

NS = no standard

R = rejected result

µg/L = micrograms per liter

USEPA = United States Environmental Protection Agency

**Cornerstone**  
Groundwater Sampling Form

Project Number: 140802 Task: 004 Well ID: SC-1  
Date: 4/23/15 Sampled By: DAW  
Sampling Time: 10:10 Recorded By: DAW  
Weather: Sunny / Cool / 30F Replicate/Split: WG (Excel)

## **INSTRUMENT IDENTIFICATION**

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE 013626	Solinst 236257	Horbia U-52	552C6LR3

## PURGING INFORMATION

Casing Material:	PVC	Purge Method:	Low Flow - Bladder Pump			
Casing Diameter:	2"	Screen Interval:	From	103'	to	109' (angled)
Total Depth:	69.77'	Pump intake depth:	103'			
Depth to Water:	12.84'					
Water Column:	56.93	Total Volume Purged:	1.43 Gallons			
Gallons/Foot:	0.163	Pump on:	9:25	Off:	11:20	
Gallons in Well:	9.29					

## OBSERVATIONS DURING SAMPLING

Well Condition: Good \_\_\_\_\_ Purge Water Disposal: To ground  
Color: Clear \_\_\_\_\_ Turbidity(qualitative): Clear  
Odor: Moderate Petroleum Odor Other (OVA, HNU,etc.): 0

Cornerstone

#### **Groundwater Sampling Form**

Project Number: 140802 Task: 004 Well ID: OB-11R  
Date: 4/21/15 Sampled By: DAW  
Sampling Time: 17:35 Recorded By: DAW  
Weather: Partly cloudy / light wind / 63F Replicate/Split: Brian Ehalt (EXCEL)

## **INSTRUMENT IDENTIFICATION**

	PID	Water-Level Meter	Water Quality Meter(s)		
Serial #:	MiniRAE 013626	Solinist	236257	Horbia U-52	552C6LR3

## PURGING INFORMATION

Casing Material:	PVC	Purge Method:	<b>Low Flow - Bladder Pump</b>			
Casing Diameter:	2"	Screen Interval:	From 25' to 40'			
Total Depth:	38.1'	Pump intake depth:	32'			
Depth to Water:	15.65					
Water Column:	22.45	Total Volume Purged:	3.43 Gallons			
Gallons/Foot:	0.163	Pump on:	16:45	Off:	18:00	
Gallons in Well:	3.66					

## OBSERVATIONS DURING SAMPLING

Well Condition: Good  
Color: Clear  
Odor: Trace petroleum

Purge Water Disposal: To ground  
Turbidity(qualitative): Cloudy  
Other (OVA, HNU,etc.): 0

**Cornerstone**

## Groundwater Sampling Form

Project Number: 140802 Task: 004 Well ID: OB-20A  
Date: 4/21/15 Sampled By: DAW  
Sampling Time: 9:25 Recorded By: DAW  
Weather: Overcast/Cool/Drizzle/48F Replicate/Split: WG / (EXCEL)

## **INSTRUMENT IDENTIFICATION**

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE 013026	236257	Horbia U-52	552C6LR3

## **PURGING INFORMATION**

Casing Material:	PVC	Purge Method:	Low Flow - Bladder Pump			
Casing Diameter:	2"	Screen Interval:	From	5'	to	20'
Total Depth:	20.5'	Pump intake depth:	17			
Depth to Water:	14.8'					
Water Column:	5.70	Total Volume Purged:	2.06 Gallons			
Gallons/Foot:	0.163	Pump on:	8:15	Off:	10:00	
Gallons in Well:	0.93					

## FIELD PARAMETERS

## OBSERVATIONS DURING SAMPLING

Well Condition: Good  
Color: Clear  
Odor: None

Purge Water Disposal: To ground  
Turbidity(qualitative): Clear

**Cornerstone**  
Groundwater Sampling Form

1 of 1

Project Number: 140802 Task: 004 Well ID: OB- 20 B  
Date: 4/21/15 Sampled By: DAW  
Sampling Time: 13:15 Recorded By: DAW  
Weather: sunny / light wind / 59F Replicate/Split: WG (EXCEL)

## **INSTRUMENT IDENTIFICATION**

	PID	Water-Level Meter	Water Quality Meter(s)		
Serial #:	MiniRAE 013626	Solinist	236257	Horbia U-52	552C6LR3

#### PURGING INFORMATION

Casing Material:	PVC	Purge Method:	Low Flow - Bladder Pump			
Casing Diameter:	2"	Screen Interval:	From 24' to 34'			
Total Depth:	35.9'	Pump intake depth:	30'			
Depth to Water:	13.36'					
Water Column:	22.54	Total Volume Purged:	2.62 Gallons			
Gallons/Foot:	0.163	Pump on:	12:20	Off:	14:00	
Gallons in Well:	3.68					

## OBSERVATIONS DURING SAMPLING

Well Condition: Good  
Color: Clear  
Odor: None

Purge Water Disposal: To ground  
Turbidity(qualitative): Clear  
Other (OVA, HNU,etc.): 0

## **Cornerstone**

Project Number: 140802 Task: 004 Well ID: OB-21  
Date: 4/20/15 Sampled By: DAW  
Sampling Time: 11:50 Recorded By: DAW  
Weather: moderate rain / 45F / light wind Replicate/Split: WG

## **INSTRUMENT IDENTIFICATION**

	PID	Water-Level Meter	Water Quality Meter(s)
Serial #:	MiniRAE 013626	Solinst	Horbia U-52

## **PURGING INFORMATION**

Casing Material:	PVC	Purge Method:	Low flow bladder			
Casing Diameter:	2"	Screen Interval:	From	6'	to	20.3'
Total Depth:	20.30'	Pump intake depth:	12'			
Depth to Water:	6.57"	Total Volume Purged:	3.96 Gallons			
Water Column:	13.73	Pump on:	10:35	Off:	13:40	
Gallons/Foot:	0.163					
Gallons in Well:	2.24					

## OBSERVATIONS DURING SAMPLING

Well Condition: Good      Purge Water Disposal: To Ground  
Color: Clear      Turbidity(qualitative): Cloudy  
Odor: None      Other (OVA, HNU,etc.): 0

**Cornerstone**  
Groundwater Sampling Form

Project Number:	140802	Task:	004	Well ID:	OB-27
Date:	4/21/15	Sampled By:	DAW		
Sampling Time:	15:35	Recorded By:	DAW		
Weather:	partly cloudy / mild	Replicate/Split:	GW (EXCEL)		

## **INSTRUMENT IDENTIFICATION**

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE 013626	Solinist	236257	Horbia U-52    552C6LR3

## **PURGING INFORMATION**

Casing Material:	PVC	Purge Method:	Low Flow - Bladder Pump		
Casing Diameter:	2"	Screen Interval:	From	24.5'	to
Total Depth:	40.15'	Pump intake depth:			39.5'
Depth to Water:	14.26'				30'
Water Column:	25.89	Total Volume Purged:		3.20 Gallons	
Gallons/Foot:	0.163	Pump on:	14:40	Off:	16:00
Gallons in Well:	4.23				

## OBSERVATIONS DURING SAMPLING

Well Condition: Good      Purge Water Disposal: To ground  
Color: Cloudy      Turbidity(qualitative): Cloudy (medium)  
Odor: Slight petroleum      Other (OVA, HNU,etc.): 0

**Cornerstone**  
Groundwater Sampling Form

Project Number: 140802 Task: 004 Well ID: RW-6A  
Date: 4/21/15 Sampled By: DAW  
Sampling Time: 19:20 Recorded By: DAW  
Weather: sunny / light wind / cool / 54F Replicate/Split: Brian E. (EXCEL)

## **INSTRUMENT IDENTIFICATION**

	PID	Water-Level Meter		Water Quality Meter(s)	
Serial #:	MiniRAE 013626	Solinist	236257	Horbia U-52	552C6LR3

## PURGING INFORMATION

Casing Material:	PVC	Purge Method:	<b>Low Flow - Bladder Pump</b>		
Casing Diameter:	2"	Screen Interval:	From	59'	to
Total Depth:	80.25'	Pump intake depth:	78'		
Depth to Water:	12.41'		63'		
Water Column:	67.84	Total Volume Purged:	2.14 Gallons		
Gallons/Foot:	0.163	Pump on:	18:25	Off:	19:45
Gallons in Well:	11.07				

## **OBSERVATIONS DURING SAMPLING**

Well Condition: Good      Purge Water Disposal: To ground  
Color: Clear      Turbidity(qualitative): Clear  
Odor: Trace petroleum      Other (OVA, HNU,etc.): 0

## **Cornerstone**

Project Number: 140802 Task: 004 Well ID: RW-6  
Date: 4/22/14 Sampled By: DAW  
Sampling Time: 12:50 Recorded By: DAW  
Weather: sunny / light wind / 57F Replicate/Split: WG (EXCEL)

### **INSTRUMENT IDENTIFICATION**

	PID	Water-Level Meter	Water Quality Meter(s)	
Serial #:	MiniRAE 013626	Solinist 236257	Horbia U-52	552C6LR3

## PURGING INFORMATION

Casing Material:	PVC	Purge Method:	<b>Low Flow - Bladder Pump</b>			
Casing Diameter:	2"	Screen Interval:	From 99' to 119'			
Total Depth:	120.8'	Pump intake depth:	110'			
Depth to Water:	11.8'					
Water Column:	109.00	Total Volume Purged:	2.47 Gallons			
Gallons/Foot:	0.163	Pump on:	11:55	Off:	13.20	
Gallons in Well:	17.79					

## OBSERVATIONS DURING SAMPLING

Well Condition: Good      Purge Water Disposal: To ground  
Color: Clear      Turbidity(qualitative): Clear  
Odor: None      Other (OVA, HNU,etc.): 0

**Cornerstone**  
Groundwater Sampling Form

Project Number: 140802 Task: 004 Well ID: RW-7  
Date: 4/20/15 Sampled By: DAW  
Sampling Time: 14:50 Recorded By: DAW  
Weather: light rain / cold / 49F / light wind Replicate/Split: GW (EXCEL)

## **INSTRUMENT IDENTIFICATION**

	PID	Water-Level Meter	Water Quality Meter(s)		
Serial #:	MiniRAE 013626	Solinst 236257	Horbia U-52	552C6LR3	

## **PURGING INFORMATION**

Casing Material:	PVC	Purge Method:	Low flow bladder			
Casing Diameter:	2"	Screen Interval:	From	99'	to	119'
Total Depth:	119'	Pump intake depth:	110'			
Depth to Water:	2.60'					
Water Column:	116.4	Total Volume Purged:	3.43 Gallons			
Gallons/Foot:	0.163	Pump on:	13:45	Off:	15:40	
Gallons in Well:	19.00					

## **OBSERVATIONS DURING SAMPLING**

Well Condition: Good      Purge Water Disposal: To Ground  
Color: Clear      Turbidity(qualitative): Clear  
Odor: None      Other (OVA, HNU,etc.): 0

## **Cornerstone**

Project Number: 140802 Task: 004 Well ID: PMP-50-042215  
Date: 4/22/15 Sampled By: DAW  
Sampling Time: 15:40 Recorded By: DAW  
Weather: Cloudy / cold / raining Replicate/Split: GW (EXCEL)

## **INSTRUMENT IDENTIFICATION**

	PID	Water-Level Meter	Water Quality Meter(s)		
Serial #:	MiniRAE 013626	Solinst 236257	Horbia U-52	552C6LR3	

## **PURGING INFORMATION**

Casing Material:	PVC	Purge Method:	Low flow bladder			
Casing Diameter:	2"	Screen Interval:	From	40'	to	60'
Total Depth:	>240'	Pump intake depth:	50			
Depth to Water:	7.05'					
Water Column:	>236.95'	Total Volume Purged:	1.69 Gallons			
Gallons/Foot:	?	Pump on:	15:00	Off:	16:15	
Gallons in Well:	?					

## **OBSERVATIONS DURING SAMPLING**

Well Condition: Good      Purge Water Disposal: To Ground  
Color: Clear      Turbidity(qualitative): Clear  
Odor: None      Other (OVA, HNU,etc.): 0

## **Cornerstone**

### Groundwater Sampling Form

Project Number: 140802 Task: 004 Well ID: PMP-180-042415  
Date: 4/24/15 Sampled By: ATV  
Sampling Time: 11:00 Recorded By: ATV  
Weather: cloudy / cold / 40F Replicate/Split: Brian (EXCEL)

## **INSTRUMENT IDENTIFICATION**

	PID	Water-Level Meter	Water Quality Meter(s)		
Serial #:	MiniRAE 013626	Solinst 236257	Horbia U-52	552C6LR3	

## **PURGING INFORMATION**

Casing Material:	PVC	Purge Method:	Low flow bladder			
Casing Diameter:	2"	Screen Interval:	From	170'	to	190'
Total Depth:	>240'	Pump intake depth:	180			
Depth to Water:	7.18	Total Volume Purged:	4.36 Gallons			
Water Column:	>236.82'	Pump on:	10:05	Off:	11:32	
Gallons/Foot:	?					
Gallons in Well:	?					

## OBSERVATIONS DURING SAMPLING

Well Condition: Good Purge Water Disposal: To Ground  
Color: Clear Turbidity(qualitative): Clear  
Odor: None Other (OVA, HNU,etc.): 0

## **Cornerstone**

Project Number: 140802 Task: 004 Well ID: PMP-230-042415  
Date: 4/24/15 Sampled By: ATV  
Sampling Time: 12:30 Recorded By: ATV  
Weather: Overcast / cold Replicate/Split: Brian (EXCEL)

## **INSTRUMENT IDENTIFICATION**

	PID	Water-Level Meter	Water Quality Meter(s)		
Serial #:	MiniRAE 013626	Solinst 236257	Horbia U-52	552C6LR3	

## **PURGING INFORMATION**

Casing Material:	PVC	Purge Method:	<b>Low flow bladder</b>		
Casing Diameter:	2"	Screen Interval:	From	220'	to
Total Depth:	>240'	Pump intake depth:	230		
Depth to Water:	7.15				
Water Column:	>265.85'	Total Volume Purged:	3.57 Gallons		
Gallons/Foot:	?	Pump on:	11:45	Off:	13:00
Gallons in Well:	?				

## **OBSERVATIONS DURING SAMPLING**

Well Condition: Good      Purge Water Disposal: To Ground  
Color: Clear      Turbidity(qualitative): Clear  
Odor: None      Other (OVA, HNU,etc.): 0



05/08/15

## Technical Report for

**Cornerstone Environmental Group, LLC**

**E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ**

**Accutest Job Number: JB92815**

**Sampling Date: 04/20/15**

### Report to:

**Cornerstone Environmental  
100 Crystal Run Road Suite 101  
Middletown, NY 10941  
Tim.Rooper@Cornerstoneeg.com; jtomalia@cadenaco.com  
ATTN: Tim Rooper**

**Total number of pages in report: 422**



Test results contained within this data package meet the requirements  
of the National Environmental Laboratory Accreditation Program  
and/or state specific certification programs as applicable.

A handwritten signature in black ink that reads "Nancy T. Cole".

**Nancy Cole  
Laboratory Director**

**Client Service contact: Marie Meidhof 732-329-0200**

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, IL, IN, KS, KY, LA, MA, MD, MI, MT, NC,  
OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TN, VA, WV, DoD ELAP (L-A-B L2248)

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Test results relate only to samples analyzed.

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## Sample Summary

Cornerstone Environmental Group, LLC

Job No: JB92815

E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ

Sample Number	Collected Date	Time By	Matrix Received	Code Type	Client Sample ID
JB92815-1	04/20/15	17:20 DW	04/20/15	AQ Trip Blank Water	TB-042015
JB92815-2	04/20/15	11:50 DW	04/20/15	AQ Ground Water	OB-21-042015
JB92815-2F	04/20/15	11:50 DW	04/20/15	AQ Groundwater Filtered	OB-21-042015
JB92815-3	04/20/15	14:50 DW	04/20/15	AQ Ground Water	RW-7-042015
JB92815-3F	04/20/15	14:50 DW	04/20/15	AQ Groundwater Filtered	RW-7-042015
JB92815-4	04/20/15	17:20 DW	04/20/15	AQ Field Blank Water	FB042015
JB92815-4F	04/20/15	17:20 DW	04/20/15	AQ Field Blank Filtered	FB042015



## CASE NARRATIVE / CONFORMANCE SUMMARY

**Client:** Cornerstone Environmental Group, LLC

**Job No** JB92815

**Site:** E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ

**Report Date** 5/8/2015 10:19:30 AM

On 04/20/2015, 2 Sample(s), 1 Trip Blank(s) and 1 Field Blank(s) were received at Accutest Laboratories at a temperature of 1.4 C. Samples were intact and chemically preserved, unless noted below. An Accutest Job Number of JB92815 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

### Volatiles by GCMS By Method SW846 8260C

**Matrix:** AQ

**Batch ID:** VU8978

- All samples were analyzed within the recommended method holding time.
- Sample(s) JB92823-6MS, JB92823-8DUP were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

### Metals By Method SW846 6010C

**Matrix:** AQ

**Batch ID:** MP86016

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB92823-5FMS, JB92823-5FMSD, JB92823-5FSDL were used as the QC samples for metals.
- RPD(s) for Serial Dilution for Iron are outside control limits for sample MP86016-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

### Wet Chemistry By Method EPA 300/SW846 9056A

**Matrix:** AQ

**Batch ID:** F:GP25927

- The data for EPA 300/SW846 9056A meets quality control requirements.
- JB92815-3 for Chloride: Analysis performed at Accutest Laboratories, Orlando FL.
- JB92815-2 for Sulfate: Analysis performed at Accutest Laboratories, Orlando FL.
- JB92815-2 for Chloride: Analysis performed at Accutest Laboratories, Orlando FL.
- JB92815-4 for Chloride: Analysis performed at Accutest Laboratories, Orlando FL.
- JB92815-4 for Sulfate: Analysis performed at Accutest Laboratories, Orlando FL.
- JB92815-3 for Sulfate: Analysis performed at Accutest Laboratories, Orlando FL.

### Wet Chemistry By Method EPA 353.2/LACHAT

**Matrix:** AQ

**Batch ID:** GP88634

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB93154-1DUP, JB93154-1MS were used as the QC samples for Nitrogen, Nitrate + Nitrite.

## Wet Chemistry By Method EPA353.2/SM4500NO2B

**Matrix:** AQ

**Batch ID:** R143372

- The data for EPA353.2/SM4500NO2B meets quality control requirements.
- JB92815-2 for Nitrogen, Nitrate: Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

**Matrix:** AQ

**Batch ID:** R143373

- The data for EPA353.2/SM4500NO2B meets quality control requirements.
- JB92815-3 for Nitrogen, Nitrate: Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

**Matrix:** AQ

**Batch ID:** R143374

- The data for EPA353.2/SM4500NO2B meets quality control requirements.
- JB92815-4 for Nitrogen, Nitrate: Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

## Wet Chemistry By Method SM2320 B-11

**Matrix:** AQ

**Batch ID:** GN24425

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB92823-11DUP were used as the QC samples for Alkalinity, Total as CaCO<sub>3</sub>.

## Wet Chemistry By Method SM2540 C-11

**Matrix:** AQ

**Batch ID:** GN24055

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB92815-2DUP were used as the QC samples for Solids, Total Dissolved.

## Wet Chemistry By Method SM4500CO2 D-11

**Matrix:** AQ

**Batch ID:** GN24459

- The data for SM4500CO2 D-11 meets quality control requirements.

## Wet Chemistry By Method SM4500NO2 B-11

**Matrix:** AQ

**Batch ID:** GN23817

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB92823-5DUP, JB92823-5MS were used as the QC samples for Nitrogen, Nitrite.

Accutest certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting Accutest's Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

Accutest Laboratories is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by Accutest Laboratories indicated via signature on the report cover

## SAMPLE DELIVERY GROUP CASE NARRATIVE

**Client:** Accutest New Jersey

**Job No:** JB92815

**Site:** CORNNYM: E203361 Ford Ringwood, Peters Mine Road,

**Report Date:** 5/5/2015 11:11:33 PM

2 Sample(s) and 1 Field Blank(s) were collected on 04/20/2015 and were received at Accutest SE on 04/30/2015 properly preserved, at 2.8 Deg. C and intact. These Samples received an Accutest job number of JB92815. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

### Wet Chemistry By Method EPA 300/SW846 9056A

**Matrix:** AQ

**Batch ID:** GP25927

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) JB92815-4MS, JB92815-4MSD were used as the QC samples for Chloride and Sulfate.

Accutest Laboratories Southeast (ALSE) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALSE and as stated on the COC. ALSE certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the ALSE Quality Manual except as noted above. This report is to be used in its entirety. ALSE is not responsible for any assumptions of data quality if partial data packages are used.

Narrative prepared by:

---

Kim Benham, Client Services (signature on file)

Date: May 5, 2015

**Summary of Hits**

**Job Number:** JB92815  
**Account:** Cornerstone Environmental Group, LLC  
**Project:** E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ  
**Collected:** 04/20/15

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
---------------	------------------	-----------------	----	-----	-------	--------

**JB92815-1 TB-042015**

No hits reported in this sample.

**JB92815-2 OB-21-042015**

Calcium	11400	5000	ug/l	SW846 6010C
Iron	1740	100	ug/l	SW846 6010C
Magnesium	5250	5000	ug/l	SW846 6010C
Alkalinity, Bicarbonate	36.7	5.0	mg/l	SM4500CO2 D-11
Alkalinity, Total as CaCO3	36.8	5.0	mg/l	SM2320 B-11
Nitrogen, Nitrate + Nitrite	0.10	0.10	mg/l	EPA 353.2/LACHAT
Solids, Total Dissolved	40.0	10	mg/l	SM2540 C-11
Sulfate <sup>a</sup>	7.6	2.0	mg/l	EPA 300/SW846 9056A

**JB92815-2F OB-21-042015**

Calcium	11700	5000	ug/l	SW846 6010C
Magnesium	5170	5000	ug/l	SW846 6010C

**JB92815-3 RW-7-042015**

Acetone	8.1 J	10	3.3	ug/l	SW846 8260C
Total TIC, Volatile	23 J			ug/l	
Calcium	10900	5000	ug/l	SW846 6010C	
Iron	522	100	ug/l	SW846 6010C	
Alkalinity, Bicarbonate	39.2	5.0	mg/l	SM4500CO2 D-11	
Alkalinity, Total as CaCO3	39.2	5.0	mg/l	SM2320 B-11	
Solids, Total Dissolved	47.0	10	mg/l	SM2540 C-11	
Sulfate <sup>a</sup>	9.3	2.0	mg/l	EPA 300/SW846 9056A	

**JB92815-3F RW-7-042015**

Calcium	11700	5000	ug/l	SW846 6010C
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**JB92815-4 FB042015**

No hits reported in this sample.

**JB92815-4F FB042015**

No hits reported in this sample.

(a) Analysis performed at Accutest Laboratories, Orlando FL.



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## Sample Results

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## Report of Analysis

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Accutest Laboratories

**Report of Analysis**

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<b>Client Sample ID:</b>	TB-042015	<b>Date Sampled:</b>	04/20/15
<b>Lab Sample ID:</b>	JB92815-1	<b>Date Received:</b>	04/20/15
<b>Matrix:</b>	AQ - Trip Blank Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260C		
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1	U194579.D	1	04/24/15	NH	n/a	n/a	VU8978
Run #2							

	<b>Purge Volume</b>
Run #1	5.0 ml
Run #2	

**VOA TCL List (OLM4.2)**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
67-64-1	Acetone	ND	10	3.3	ug/l	
71-43-2	Benzene	ND	0.50	0.24	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	1.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.42	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	5.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.25	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.22	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.19	ug/l	
75-00-3	Chloroethane	ND	1.0	0.34	ug/l	
67-66-3	Chloroform	ND	1.0	0.19	ug/l	
74-87-3	Chloromethane	ND	1.0	0.41	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.99	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.15	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.23	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.19	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.23	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.27	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.90	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.17	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.51	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.27	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.65	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.39	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.52	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.7	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.23	ug/l	

ND = Not detected      MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

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**Report of Analysis**

<b>Client Sample ID:</b>	TB-042015	<b>Date Sampled:</b>	04/20/15
<b>Lab Sample ID:</b>	JB92815-1	<b>Date Received:</b>	04/20/15
<b>Matrix:</b>	AQ - Trip Blank Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260C		
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

**VOA TCL List (OLM4.2)**

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.0	1.9	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.22	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.24	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.73	ug/l	
100-42-5	Styrene	ND	1.0	0.27	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.40	ug/l	
108-88-3	Toluene	ND	1.0	0.16	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.21	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.21	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.43	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.15	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	92%		76-120%
17060-07-0	1,2-Dichloroethane-D4	94%		73-122%
2037-26-5	Toluene-D8	93%		84-119%
460-00-4	4-Bromofluorobenzene	105%		78-117%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	
	Total Alkanes		0	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Accutest Laboratories

**Report of Analysis**

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<b>Client Sample ID:</b>	OB-21-042015	<b>Date Sampled:</b>	04/20/15
<b>Lab Sample ID:</b>	JB92815-2	<b>Date Received:</b>	04/20/15
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260C		
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1	U194582.D	1	04/24/15	NH	n/a	n/a	VU8978
Run #2							

	<b>Purge Volume</b>
Run #1	5.0 ml
Run #2	

**VOA TCL List (OLM4.2)**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
67-64-1	Acetone	ND	10	3.3	ug/l	
71-43-2	Benzene	ND	0.50	0.24	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	1.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.42	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	5.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.25	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.22	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.19	ug/l	
75-00-3	Chloroethane	ND	1.0	0.34	ug/l	
67-66-3	Chloroform	ND	1.0	0.19	ug/l	
74-87-3	Chloromethane	ND	1.0	0.41	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.99	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.15	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.23	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.19	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.23	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.27	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.90	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.17	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.51	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.27	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.65	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.39	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.52	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.7	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.23	ug/l	

ND = Not detected      MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

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<b>Client Sample ID:</b>	OB-21-042015	<b>Date Sampled:</b>	04/20/15
<b>Lab Sample ID:</b>	JB92815-2	<b>Date Received:</b>	04/20/15
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260C		
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

**VOA TCL List (OLM4.2)**

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.0	1.9	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.22	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.24	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.73	ug/l	
100-42-5	Styrene	ND	1.0	0.27	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.40	ug/l	
108-88-3	Toluene	ND	1.0	0.16	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.21	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.21	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.43	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.15	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	92%		76-120%
17060-07-0	1,2-Dichloroethane-D4	94%		73-122%
2037-26-5	Toluene-D8	92%		84-119%
460-00-4	4-Bromofluorobenzene	103%		78-117%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
Total TIC, Volatile			0	ug/l	
Total Alkanes			0	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

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<b>Client Sample ID:</b>	OB-21-042015	<b>Date Sampled:</b>	04/20/15
<b>Lab Sample ID:</b>	JB92815-2	<b>Date Received:</b>	04/20/15
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

**Total Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium	11400	5000	ug/l	1	04/24/15	04/27/15 KK	SW846 6010C <sup>1</sup>	SW846 3010A <sup>2</sup>
Iron	1740	100	ug/l	1	04/24/15	04/27/15 KK	SW846 6010C <sup>1</sup>	SW846 3010A <sup>2</sup>
Magnesium	5250	5000	ug/l	1	04/24/15	04/27/15 KK	SW846 6010C <sup>1</sup>	SW846 3010A <sup>2</sup>
Sodium	< 10000	10000	ug/l	1	04/24/15	04/27/15 KK	SW846 6010C <sup>1</sup>	SW846 3010A <sup>2</sup>

(1) Instrument QC Batch: MA36522

(2) Prep QC Batch: MP86016

RL = Reporting Limit

**Report of Analysis**

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<b>Client Sample ID:</b>	OB-21-042015	<b>Date Sampled:</b>	04/20/15
<b>Lab Sample ID:</b>	JB92815-2	<b>Date Received:</b>	04/20/15
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

**General Chemistry**

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Bicarbonate	36.7	5.0	mg/l	1	04/30/15	JA	SM4500CO2 D-11
Alkalinity, Total as CaCO <sub>3</sub>	36.8	5.0	mg/l	1	04/30/15	JA	SM2320 B-11
Chloride <sup>a</sup>	< 2.0	2.0	mg/l	1	05/04/15 18:07	AFL	EPA 300/SW846 9056A
Nitrogen, Nitrate <sup>b</sup>	< 0.11	0.11	mg/l	1	04/29/15 17:15	BS	EPA353.2/SM4500NO2B
Nitrogen, Nitrate + Nitrite	0.10	0.10	mg/l	1	04/29/15 17:15	BS	EPA 353.2/LACHAT
Nitrogen, Nitrite	< 0.010	0.010	mg/l	1	04/21/15 21:30	JM	SM4500NO2 B-11
Solids, Total Dissolved	40.0	10	mg/l	1	04/24/15	KP	SM2540 C-11
Sulfate <sup>a</sup>	7.6	2.0	mg/l	1	05/04/15 18:07	AFL	EPA 300/SW846 9056A

(a) Analysis performed at Accutest Laboratories, Orlando FL.

(b) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

RL = Reporting Limit

**Report of Analysis**

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<b>Client Sample ID:</b>	OB-21-042015	<b>Date Sampled:</b>	04/20/15
<b>Lab Sample ID:</b>	JB92815-2F	<b>Date Received:</b>	04/20/15
<b>Matrix:</b>	AQ - Groundwater Filtered	<b>Percent Solids:</b>	n/a
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

**Dissolved Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium	11700	5000	ug/l	1	04/24/15	04/27/15 KK	SW846 6010C <sup>1</sup>	SW846 3010A <sup>2</sup>
Iron	< 100	100	ug/l	1	04/24/15	04/27/15 KK	SW846 6010C <sup>1</sup>	SW846 3010A <sup>2</sup>
Magnesium	5170	5000	ug/l	1	04/24/15	04/27/15 KK	SW846 6010C <sup>1</sup>	SW846 3010A <sup>2</sup>
Sodium	< 10000	10000	ug/l	1	04/24/15	04/27/15 KK	SW846 6010C <sup>1</sup>	SW846 3010A <sup>2</sup>

(1) Instrument QC Batch: MA36522

(2) Prep QC Batch: MP86016

RL = Reporting Limit

Accutest Laboratories

**Report of Analysis**

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<b>Client Sample ID:</b>	RW-7-042015	<b>Date Sampled:</b>	04/20/15
<b>Lab Sample ID:</b>	JB92815-3	<b>Date Received:</b>	04/20/15
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260C		
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1	U194581.D	1	04/24/15	NH	n/a	n/a	VU8978
Run #2							

	<b>Purge Volume</b>
Run #1	5.0 ml
Run #2	

**VOA TCL List (OLM4.2)**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
67-64-1	Acetone	8.1	10	3.3	ug/l	J
71-43-2	Benzene	ND	0.50	0.24	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	1.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.42	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	5.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.25	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.22	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.19	ug/l	
75-00-3	Chloroethane	ND	1.0	0.34	ug/l	
67-66-3	Chloroform	ND	1.0	0.19	ug/l	
74-87-3	Chloromethane	ND	1.0	0.41	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.99	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.15	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.23	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.19	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.23	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.27	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.90	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.17	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.51	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.27	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.65	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.39	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.52	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.7	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.23	ug/l	

ND = Not detected      MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

<b>Client Sample ID:</b>	RW-7-042015	<b>Date Sampled:</b>	04/20/15
<b>Lab Sample ID:</b>	JB92815-3	<b>Date Received:</b>	04/20/15
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260C		
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

**VOA TCL List (OLM4.2)**

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.0	1.9	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.22	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.24	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.73	ug/l	
100-42-5	Styrene	ND	1.0	0.27	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.40	ug/l	
108-88-3	Toluene	ND	1.0	0.16	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.21	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.21	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.43	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.15	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	92%		76-120%
17060-07-0	1,2-Dichloroethane-D4	93%		73-122%
2037-26-5	Toluene-D8	93%		84-119%
460-00-4	4-Bromofluorobenzene	104%		78-117%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
67-63-0	Isopropyl Alcohol	7.43	23	ug/l	JN
	Total TIC, Volatile		23	ug/l	J
	Total Alkanes		0	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

Page 1 of 1

**Client Sample ID:** RW-7-042015  
**Lab Sample ID:** JB92815-3  
**Matrix:** AQ - Ground Water  
**Date Sampled:** 04/20/15  
**Date Received:** 04/20/15  
**Percent Solids:** n/a  
**Project:** E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ

**Total Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium	10900	5000	ug/l	1	04/24/15	04/27/15 KK	SW846 6010C <sup>1</sup>	SW846 3010A <sup>2</sup>
Iron	522	100	ug/l	1	04/24/15	04/27/15 KK	SW846 6010C <sup>1</sup>	SW846 3010A <sup>2</sup>
Magnesium	< 5000	5000	ug/l	1	04/24/15	04/27/15 KK	SW846 6010C <sup>1</sup>	SW846 3010A <sup>2</sup>
Sodium	< 10000	10000	ug/l	1	04/24/15	04/27/15 KK	SW846 6010C <sup>1</sup>	SW846 3010A <sup>2</sup>

(1) Instrument QC Batch: MA36522

(2) Prep QC Batch: MP86016

RL = Reporting Limit

**Report of Analysis**

Page 1 of 1

<b>Client Sample ID:</b>	RW-7-042015	<b>Date Sampled:</b>	04/20/15
<b>Lab Sample ID:</b>	JB92815-3	<b>Date Received:</b>	04/20/15
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

**General Chemistry**

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Bicarbonate	39.2	5.0	mg/l	1	04/30/15	JA	SM4500CO2 D-11
Alkalinity, Total as CaCO <sub>3</sub>	39.2	5.0	mg/l	1	04/30/15	JA	SM2320 B-11
Chloride <sup>a</sup>	< 2.0	2.0	mg/l	1	05/04/15 18:23	AFL	EPA 300/SW846 9056A
Nitrogen, Nitrate <sup>b</sup>	< 0.11	0.11	mg/l	1	04/29/15 17:16	BS	EPA353.2/SM4500NO2B
Nitrogen, Nitrate + Nitrite	< 0.10	0.10	mg/l	1	04/29/15 17:16	BS	EPA 353.2/LACHAT
Nitrogen, Nitrite	< 0.010	0.010	mg/l	1	04/21/15 21:30	JM	SM4500NO2 B-11
Solids, Total Dissolved	47.0	10	mg/l	1	04/24/15	KP	SM2540 C-11
Sulfate <sup>a</sup>	9.3	2.0	mg/l	1	05/04/15 18:23	AFL	EPA 300/SW846 9056A

(a) Analysis performed at Accutest Laboratories, Orlando FL.

(b) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

RL = Reporting Limit

**Report of Analysis**

Page 1 of 1

<b>Client Sample ID:</b>	RW-7-042015	<b>Date Sampled:</b>	04/20/15
<b>Lab Sample ID:</b>	JB92815-3F	<b>Date Received:</b>	04/20/15
<b>Matrix:</b>	AQ - Groundwater Filtered	<b>Percent Solids:</b>	n/a
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

**Dissolved Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium	11700	5000	ug/l	1	04/24/15	04/27/15 KK	SW846 6010C <sup>1</sup>	SW846 3010A <sup>2</sup>
Iron	< 100	100	ug/l	1	04/24/15	04/27/15 KK	SW846 6010C <sup>1</sup>	SW846 3010A <sup>2</sup>
Magnesium	< 5000	5000	ug/l	1	04/24/15	04/27/15 KK	SW846 6010C <sup>1</sup>	SW846 3010A <sup>2</sup>
Sodium	< 10000	10000	ug/l	1	04/24/15	04/27/15 KK	SW846 6010C <sup>1</sup>	SW846 3010A <sup>2</sup>

(1) Instrument QC Batch: MA36522

(2) Prep QC Batch: MP86016

RL = Reporting Limit

Accutest Laboratories

**Report of Analysis**

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<b>Client Sample ID:</b>	FB042015	<b>Date Sampled:</b>	04/20/15
<b>Lab Sample ID:</b>	JB92815-4	<b>Date Received:</b>	04/20/15
<b>Matrix:</b>	AQ - Field Blank Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260C		
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1	U194580.D	1	04/24/15	NH	n/a	n/a	VU8978
Run #2							

	<b>Purge Volume</b>
Run #1	5.0 ml
Run #2	

**VOA TCL List (OLM4.2)**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
67-64-1	Acetone	ND	10	3.3	ug/l	
71-43-2	Benzene	ND	0.50	0.24	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	1.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.42	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	5.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.25	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.22	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.19	ug/l	
75-00-3	Chloroethane	ND	1.0	0.34	ug/l	
67-66-3	Chloroform	ND	1.0	0.19	ug/l	
74-87-3	Chloromethane	ND	1.0	0.41	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.99	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.15	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.23	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.19	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.23	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.27	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.90	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.17	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.51	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.27	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.65	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.39	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.52	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.7	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.23	ug/l	

ND = Not detected      MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

<b>Client Sample ID:</b>	FB042015	<b>Date Sampled:</b>	04/20/15
<b>Lab Sample ID:</b>	JB92815-4	<b>Date Received:</b>	04/20/15
<b>Matrix:</b>	AQ - Field Blank Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260C		
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

**VOA TCL List (OLM4.2)**

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.0	1.9	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.22	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.24	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.73	ug/l	
100-42-5	Styrene	ND	1.0	0.27	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.40	ug/l	
108-88-3	Toluene	ND	1.0	0.16	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.21	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.21	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.43	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.15	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	91%		76-120%
17060-07-0	1,2-Dichloroethane-D4	93%		73-122%
2037-26-5	Toluene-D8	92%		84-119%
460-00-4	4-Bromofluorobenzene	104%		78-117%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
Total TIC, Volatile			0	ug/l	
Total Alkanes			0	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

Page 1 of 1

<b>Client Sample ID:</b>	FB042015	<b>Date Sampled:</b>	04/20/15
<b>Lab Sample ID:</b>	JB92815-4	<b>Date Received:</b>	04/20/15
<b>Matrix:</b>	AQ - Field Blank Water	<b>Percent Solids:</b>	n/a
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

**Total Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium	< 5000	5000	ug/l	1	04/24/15	04/27/15 KK	SW846 6010C <sup>1</sup>	SW846 3010A <sup>2</sup>
Iron	< 100	100	ug/l	1	04/24/15	04/27/15 KK	SW846 6010C <sup>1</sup>	SW846 3010A <sup>2</sup>
Magnesium	< 5000	5000	ug/l	1	04/24/15	04/27/15 KK	SW846 6010C <sup>1</sup>	SW846 3010A <sup>2</sup>
Sodium	< 10000	10000	ug/l	1	04/24/15	04/27/15 KK	SW846 6010C <sup>1</sup>	SW846 3010A <sup>2</sup>

(1) Instrument QC Batch: MA36522

(2) Prep QC Batch: MP86016

RL = Reporting Limit

**Report of Analysis**

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<b>Client Sample ID:</b>	FB042015	<b>Date Sampled:</b>	04/20/15
<b>Lab Sample ID:</b>	JB92815-4	<b>Date Received:</b>	04/20/15
<b>Matrix:</b>	AQ - Field Blank Water	<b>Percent Solids:</b>	n/a
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

**General Chemistry**

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Bicarbonate	< 5.0	5.0	mg/l	1	04/30/15	JA	SM4500CO2 D-11
Alkalinity, Total as CaCO <sub>3</sub>	< 5.0	5.0	mg/l	1	04/30/15	JA	SM2320 B-11
Chloride <sup>a</sup>	< 2.0	2.0	mg/l	1	05/04/15 18:39	AFL	EPA 300/SW846 9056A
Nitrogen, Nitrate <sup>b</sup>	< 0.11	0.11	mg/l	1	04/29/15 17:17	BS	EPA353.2/SM4500NO2B
Nitrogen, Nitrate + Nitrite	< 0.10	0.10	mg/l	1	04/29/15 17:17	BS	EPA 353.2/LACHAT
Nitrogen, Nitrite	< 0.010	0.010	mg/l	1	04/21/15 21:30	JM	SM4500NO2 B-11
Solids, Total Dissolved	< 10	10	mg/l	1	04/24/15	KP	SM2540 C-11
Sulfate <sup>a</sup>	< 2.0	2.0	mg/l	1	05/04/15 18:39	AFL	EPA 300/SW846 9056A

(a) Analysis performed at Accutest Laboratories, Orlando FL.

(b) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

RL = Reporting Limit

**Report of Analysis**

Page 1 of 1

<b>Client Sample ID:</b>	FB042015	<b>Date Sampled:</b>	04/20/15
<b>Lab Sample ID:</b>	JB92815-4F	<b>Date Received:</b>	04/20/15
<b>Matrix:</b>	AQ - Field Blank Filtered	<b>Percent Solids:</b>	n/a
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

**Dissolved Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium	< 5000	5000	ug/l	1	04/24/15	04/27/15 KK	SW846 6010C <sup>1</sup>	SW846 3010A <sup>2</sup>
Iron	< 100	100	ug/l	1	04/24/15	04/27/15 KK	SW846 6010C <sup>1</sup>	SW846 3010A <sup>2</sup>
Magnesium	< 5000	5000	ug/l	1	04/24/15	04/27/15 KK	SW846 6010C <sup>1</sup>	SW846 3010A <sup>2</sup>
Sodium	< 10000	10000	ug/l	1	04/24/15	04/27/15 KK	SW846 6010C <sup>1</sup>	SW846 3010A <sup>2</sup>

(1) Instrument QC Batch: MA36522

(2) Prep QC Batch: MP86016

RL = Reporting Limit



## Misc. Forms

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### Custody Documents and Other Forms

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Includes the following where applicable:

- Chain of Custody
- Sample Tracking Chronicle
- Internal Chain of Custody



# CHAIN OF CUSTODY

PAGE    OF   

2235 Route 130, Dayton, NJ 08810  
TEL. 732-329-0200 FAX: 732-329-3499/480  
[www.accutest.com](http://www.accutest.com)

Client / Reporting Information		Project Information		Requested Analysis (see TEST CODE sheet)		Matrix Codes			
Company Name <b>Cornelstoen Environmental Group</b> Street Address <b>100 Crystal Run Rd., Suite 101</b> City <b>Middletown</b> State <b>NY</b> Zip <b>10541</b> Project Contact <b>Tim Rooper</b> E-mail <b>tim.rooper@cornelstoen.com</b> Phone # <b>845-695-0252</b> Fax # <b>845-695-0252</b> Sampler(s) Name(s) <b>Rob Lay, Peter Bergend and Dan Wheeler</b>		Project Name: <b>E 203361 (Ford Ringwood)</b> Street <b>Peters Mine Road</b> City <b>Ringwood</b> State <b>NJ</b> Billing Information (if different from Report to) Company Name Street Address Client Purchase Order # City _____ State _____ Zip _____ Project Manager <b>Tim Rooper</b> Attention:							
Accutest Sample # <b>1</b> <b>2F</b> <b>3E</b> <b>4F</b>		Field ID / Point of Collection <b>TB-042015</b> <b>OB-21-042015</b> <b>RW-7-042015</b> <b>FB-042015</b>		Collection MEOH/HD Vial # <b>4/20/15</b> Date <b>-</b> Time <b>-</b> Sampled by <b>TB</b> <b>4/20/15 11:50</b> DW <b>GW</b> <b>8</b> <b>3</b> <b>2/12</b> <b>4/20/15 14:50</b> DW <b>GW</b> <b>8</b> <b>3</b> <b>2/12</b> <b>4/20/15 17:20</b> DW <b>FB</b> <b>7</b> <b>2</b> <b>2/12</b>		Number of preserved Bottles EC HIGH HNO3 H2SO4 NONE DI Water MECH ENCORE		TDS SO4 Chloride Nitrate HCO3 Mg, Na, Ca, Fe Dissolved Mg, Na, Ca, Fe	
Turnaround Time (Business days)		Data Deliverable Information		Comments / Special Instructions					
<input type="checkbox"/> Std. 10 Business Days <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 3 Day RUSH <input type="checkbox"/> 2 Day RUSH <input type="checkbox"/> 1 Day RUSH <input type="checkbox"/> other _____		Approved By (Accutest PM): / Date: <hr/> <hr/> <hr/> <hr/> <hr/>		<input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> FULLT1 (Level 3+4) <input type="checkbox"/> NJ Reduced <input type="checkbox"/> Commercial "C" <input type="checkbox"/> NY Data of Known Quality Protocol Reporting <small>Commercial "A" = Results Only, Commercial "B" = Results + QC Summary NJ Reduced = Results + QC Summary + Partial Raw data</small>		INITIAL ASSESSMENT <i>[Signature]</i> LABEL VERIFICATION <i>[Signature]</i>			
Relationship to Sampler: <b>3</b> Relinquished by Sampler: <b>3</b> Relinquished by: <b>5</b>		Date Time: <b>1/20/15 17:48</b> Received By: <b>1</b> <b>1 hour</b> Date Time: <b>1/20/15 17:48</b> Received By: <b>2</b> <b>1 hour</b> Date Time: <b>1/20/15 17:48</b> Received By: <b>3</b> Date Time: <b>1/20/15 17:48</b> Received By: <b>4</b> Date Time: <b>1/20/15 17:48</b> Received By: <b>5</b>		Relinquished By: <b>2</b> <b>1 hour</b> Relinquished By: <b>4</b> Custody Seal # <b>1</b> <input type="checkbox"/> Intact <input type="checkbox"/> Not intact Preserved where applicable		Date Time: <b>1/20/15 17:48</b> Received By: <b>2</b> Date Time: <b>1/20/15 17:48</b> Received By: <b>4</b> On Ice <input type="checkbox"/> Cooler Temp. <b>21.0</b>			

**JB92815: Chain of Custody**

**Page 1 of 3**



## Accutest Laboratories Sample Receipt Summary

Accutest Job Number: JB92815

Client: \_\_\_\_\_

Project: \_\_\_\_\_

Date / Time Received: 4/20/2015 7:22:00 PM

Delivery Method: \_\_\_\_\_

Airbill #'s: \_\_\_\_\_

Cooler Temps (Initial/Adjusted): #1: (3.2/1.4); 0

**Cooler Security**      Y or N

- |                           |                                     |                          |                       |                                     |                          |
|---------------------------|-------------------------------------|--------------------------|-----------------------|-------------------------------------|--------------------------|
| 1. Custody Seals Present: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 3. COC Present:       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Custody Seals Intact:  | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 4. Smpl Dates/Time OK | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

**Cooler Temperature**      Y or N

- |                              |                                     |                          |
|------------------------------|-------------------------------------|--------------------------|
| 1. Temp criteria achieved:   | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Cooler temp verification: | IR Gun                              |                          |
| 3. Cooler media:             | Ice (Bag)                           |                          |
| 4. No. Coolers:              | 1                                   |                          |

**Quality Control Preservation**      Y or N      N/A

- |                                 |                                     |                          |                          |
|---------------------------------|-------------------------------------|--------------------------|--------------------------|
| 1. Trip Blank present / cooler: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Trip Blank listed on COC:    | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Samples preserved properly:  | <input checked="" type="checkbox"/> | <input type="checkbox"/> |                          |
| 4. VOCs headspace free:         | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

**Sample Integrity - Documentation**

- |  |                                     |                          |
|--|-------------------------------------|--------------------------|
| 1. Sample labels present on bottles:   | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Container labeling complete:        | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Sample container label / COC agree: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

**Sample Integrity - Condition**

- |                                  |                                     |                          |
|----------------------------------|-------------------------------------|--------------------------|
| 1. Sample recvd within HT:       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. All containers accounted for: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Condition of sample:          | Intact                              |                          |

**Sample Integrity - Instructions**

- |   |                                     |                                     |
|---|-------------------------------------|-------------------------------------|
| 1. Analysis requested is clear:           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 2. Bottles received for unspecified tests | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 3. Sufficient volume recvd for analysis:  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 4. Compositing instructions clear:        | <input type="checkbox"/>            | <input type="checkbox"/>            |
| 5. Filtering instructions clear:          | <input type="checkbox"/>            | <input type="checkbox"/>            |

Comments

Accutest Laboratories  
V:732.329.02002235 US Highway 130  
F: 732.329.3499Dayton, New Jersey  
www.accutest.com**JB92815: Chain of Custody****Page 2 of 3**

**Job Change Order:**

JB92815

Requested Date:	5/7/2015	Received Date:	4/20/2015
Account Name:	Cornerstone Environmental Grou	Due Date:	5/4/2015
Project Description:	E203361 Ford Ringwood, Peters Mine Road, Ringw	Deliverable:	REDT2
CSR:	mariem	TAT (Days):	14

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**Sample #:** JB92815-all      **Change:**  
**Dept:** Please revise to FULT1. Involved sub to ALSE.

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**Above Changes Per:****Date/Time:** 5/7/2015 3:02:49 PM

To Client: This Change Order is confirmation of the revisions, previously discussed with the Accutest Client Service Representative.

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5.1

**JB92815: Chain of Custody**  
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Accutest Laboratories

## Internal Sample Tracking Chronicle

Cornerstone Environmental Group, LLC

**Job No:** JB92815

E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ

Sample Number	Method	Analyzed	By	Prepped By	Test Codes
JB92815-1	Collected: 20-APR-15 17:20 By: DW TB-042015			Received: 20-APR-15 By: TH	
JB92815-1	SW846 8260C	24-APR-15 04:00	NH		V8260TCL42+
JB92815-2	Collected: 20-APR-15 11:50 By: DW OB-21-042015			Received: 20-APR-15 By: TH	
JB92815-2	SM4500NO2 B-11	21-APR-15 21:30	JM		NO2
JB92815-2	SM2540 C-11	24-APR-15	KP		TDS
JB92815-2	SW846 8260C	24-APR-15 05:26	NH		V8260TCL42+
JB92815-2	SW846 6010C	27-APR-15 20:06	KK	24-APR-15 MO	CA,FE,MG,NA
JB92815-2	EPA353.2/SM4500NO2	29-APR-15 17:15	BS		NO3O
JB92815-2	EPA 353.2/LACHAT	29-APR-15 17:15	BS	29-APR-15 BS	NO32
JB92815-2	SM2320 B-11	30-APR-15	JA		ALK
JB92815-2	SM4500CO2 D-11	30-APR-15	JA		BIC
JB92815-2	EPA 300/SW846 9056A04-MAY-15	18:07	AFL	04-MAY-15 AFL	CHL,SO4
JB92815-3	Collected: 20-APR-15 14:50 By: DW RW-7-042015			Received: 20-APR-15 By: TH	
JB92815-3	SM4500NO2 B-11	21-APR-15 21:30	JM		NO2
JB92815-3	SM2540 C-11	24-APR-15	KP		TDS
JB92815-3	SW846 8260C	24-APR-15 04:58	NH		V8260TCL42+
JB92815-3	SW846 6010C	27-APR-15 20:09	KK	24-APR-15 MO	CA,FE,MG,NA
JB92815-3	EPA353.2/SM4500NO2	29-APR-15 17:16	BS		NO3O
JB92815-3	EPA 353.2/LACHAT	29-APR-15 17:16	BS	29-APR-15 BS	NO32
JB92815-3	SM2320 B-11	30-APR-15	JA		ALK
JB92815-3	SM4500CO2 D-11	30-APR-15	JA		BIC
JB92815-3	EPA 300/SW846 9056A04-MAY-15	18:23	AFL	04-MAY-15 AFL	CHL,SO4
JB92815-4	Collected: 20-APR-15 17:20 By: DW FB042015			Received: 20-APR-15 By: TH	
JB92815-4	SM4500NO2 B-11	21-APR-15 21:30	JM		NO2
JB92815-4	SM2540 C-11	24-APR-15	KP		TDS
JB92815-4	SW846 8260C	24-APR-15 04:28	NH		V8260TCL42+
JB92815-4	SW846 6010C	27-APR-15 20:17	KK	24-APR-15 MO	CA,FE,MG,NA
JB92815-4	EPA353.2/SM4500NO2	29-APR-15 17:17	BS		NO3O
JB92815-4	EPA 353.2/LACHAT	29-APR-15 17:17	BS	29-APR-15 BS	NO32

## Internal Sample Tracking Chronicle

Cornerstone Environmental Group, LLC

**Job No:** JB92815

E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ

Sample Number	Method	Analyzed	By	Prepped By	Test Codes
JB92815-4	SM2320 B-11	30-APR-15	JA		ALK
JB92815-4	SM4500CO2 D-11	30-APR-15	JA		BIC
JB92815-4	EPA 300/SW846 9056A04-MAY-15	18:39	AFL	04-MAY-15 AFL	CHL,SO4
JB92815-2F Collected: 20-APR-15 11:50 By: DW			Received: 20-APR-15 By: TH		
OB-21-042015					
JB92815-2F SW846 6010C		27-APR-15 20:20	KK	24-APR-15 MO	CA,FE,MG,NA
JB92815-3F Collected: 20-APR-15 14:50 By: DW			Received: 20-APR-15 By: TH		
RW-7-042015					
JB92815-3F SW846 6010C		27-APR-15 20:23	KK	24-APR-15 MO	CA,FE,MG,NA
JB92815-4F Collected: 20-APR-15 17:20 By: DW			Received: 20-APR-15 By: TH		
FB042015					
JB92815-4F SW846 6010C		27-APR-15 20:26	KK	24-APR-15 MO	CA,FE,MG,NA

## Accutest Internal Chain of Custody

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**Job Number:** JB92815  
**Account:** CORNNYM Cornerstone Environmental Group, LLC  
**Project:** E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ  
**Received:** 04/20/15

Sample/Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JB92815-1.1	Secured Storage	Nicole Horvath	04/23/15 10:41	Retrieve from Storage
JB92815-1.1	Nicole Horvath	GCMSU	04/23/15 10:41	Load on Instrument
JB92815-1.1	GCMSU	Nicole Horvath	04/24/15 09:18	Unload from Instrument
JB92815-1.1	Nicole Horvath	Secured Storage	04/24/15 09:18	Return to Storage
JB92815-2.1	Secured Storage	Todd Shoemaker	04/24/15 09:11	Retrieve from Storage
JB92815-2.1	Todd Shoemaker	Krimesh Patel	04/24/15 09:14	Custody Transfer
JB92815-2.1	Krimesh Patel	Secured Storage	04/24/15 16:50	Return to Storage
JB92815-2.1	Secured Storage	Alfredo Crespo	04/30/15 08:46	Retrieve from Storage
JB92815-2.1	Alfredo Crespo	Secured Staging Area	04/30/15 08:46	Return to Storage
JB92815-2.1	Secured Staging Area	Jayshree Amin	04/30/15 08:50	Retrieve from Storage
JB92815-2.1	Jayshree Amin	Secured Storage	04/30/15 16:49	Return to Storage
JB92815-2.2	Secured Storage	Todd Shoemaker	04/24/15 11:55	Retrieve from Storage
JB92815-2.2	Todd Shoemaker	Secured Staging Area	04/24/15 11:55	Return to Storage
JB92815-2.2	Secured Staging Area	Michael Obasidey	04/24/15 14:44	Retrieve from Storage
JB92815-2.2	Michael Obasidey	Masooda Sultani	04/25/15 13:14	Custody Transfer
JB92815-2.2	Masooda Sultani	Secured Storage	04/25/15 14:13	Return to Storage
JB92815-2.2.1	Michael Obasidey	Metals Digestion	04/24/15 14:52	Digestate from JB92815-2.2
JB92815-2.2.1	Metals Digestion	Michael Obasidey	04/24/15 14:52	Digestate from JB92815-2.2
JB92815-2.2.1	Michael Obasidey	Metals Digestate Storage	04/24/15 14:52	Return to Storage
JB92815-2.2.1	Metals Digestate Storage	Kyle Kroeze	04/27/15 18:56	Retrieve from Storage
JB92815-2.2.1	Kyle Kroeze	Metals Digestate Storage	04/27/15 18:57	Return to Storage
JB92815-2.4	Secured Storage	Todd Shoemaker	04/29/15 11:31	Retrieve from Storage
JB92815-2.4	Todd Shoemaker	Brian Schneller	04/29/15 11:33	Custody Transfer
JB92815-2.4	Brian Schneller	Secured Storage	04/29/15 18:29	Return to Storage
JB92815-2.5	Secured Storage	Lucas Schneider	04/20/15 21:08	Retrieve from Storage
JB92815-2.5	Lucas Schneider	Secured Storage	04/20/15 22:40	Return to Storage
JB92815-2.5	Secured Storage	Todd Shoemaker	04/21/15 14:16	Retrieve from Storage
JB92815-2.5	Todd Shoemaker	Jeremy Miles	04/21/15 15:23	Custody Transfer
JB92815-2.5	Jeremy Miles	Secured Storage	04/21/15 23:29	Return to Storage
JB92815-2.5	Secured Storage	Alfredo Crespo	04/29/15 07:56	Retrieve from Storage
JB92815-2.5	Alfredo Crespo	Secured Staging Area	04/29/15 07:56	Return to Storage
JB92815-2.5	Secured Staging Area	Chris Brunson	04/29/15 08:49	Retrieve from Storage
JB92815-2.5	Shirley Grzybowski	Secured Storage	04/29/15 15:04	Return to Storage
Analyst unavailable for custody transfer.				
JB92815-2.5	Secured Storage	Alfredo Crespo	04/30/15 07:20	Retrieve from Storage
JB92815-2.5	Alfredo Crespo	Secured Staging Area	04/30/15 07:20	Return to Storage
JB92815-2.5	Secured Staging Area	Alfredo Crespo	04/30/15 09:06	Retrieve from Storage
JB92815-2.5	Alfredo Crespo	Secured Storage	04/30/15 09:06	Return to Storage
JB92815-2.5	Secured Storage	Gage Donahue	04/30/15 09:40	Retrieve from Storage

## Accutest Internal Chain of Custody

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**Job Number:** JB92815  
**Account:** CORNNYM Cornerstone Environmental Group, LLC  
**Project:** E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ  
**Received:** 04/20/15

Sample/Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JB92815-2.5	Gage Donahue	Secured Staging Area	04/30/15 09:40	Return to Storage
JB92815-2.5	Secured Staging Area	Jayshree Amin	04/30/15 09:44	Retrieve from Storage
JB92815-2.5	Jayshree Amin	Secured Storage	04/30/15 16:49	Return to Storage
JB92815-2.6	Secured Storage	Nicole Horvath	04/23/15 10:41	Retrieve from Storage
JB92815-2.6	Nicole Horvath	GCMSU	04/23/15 10:41	Load on Instrument
JB92815-2.6	GCMSU	Nicole Horvath	04/24/15 09:18	Unload from Instrument
JB92815-2.6	Nicole Horvath	Secured Storage	04/24/15 09:18	Return to Storage
JB92815-2.9	Secured Storage	Bernadette Vassilatos	04/29/15 13:14	Retrieve from Storage
JB92815-2.9	Bernadette Vassilatos		04/29/15 13:15	Subcontract
JB92815-2F.3	Secured Storage	Todd Shoemaker	04/24/15 11:55	Retrieve from Storage
JB92815-2F.3	Todd Shoemaker	Secured Staging Area	04/24/15 11:55	Return to Storage
JB92815-2F.3	Secured Staging Area	Michael Obasidey	04/24/15 14:44	Retrieve from Storage
JB92815-2F.3	Michael Obasidey	Masooda Sultani	04/25/15 13:14	Custody Transfer
JB92815-2F.3	Masooda Sultani	Secured Storage	04/25/15 14:13	Return to Storage
JB92815-2F.3.1	Michael Obasidey	Metals Digestion	04/24/15 14:52	Digestate from JB92815-2F.3
JB92815-2F.3.1	Metals Digestion	Michael Obasidey	04/24/15 14:52	Digestate from JB92815-2F.3
JB92815-2F.3.1	Michael Obasidey	Metals Digestate Storage	04/24/15 14:52	Return to Storage
JB92815-2F.3.1	Metals Digestate Storage	Kyle Kroeze	04/27/15 18:56	Retrieve from Storage
JB92815-2F.3.1	Kyle Kroeze	Metals Digestate Storage	04/27/15 18:57	Return to Storage
JB92815-3.1	Secured Storage	Todd Shoemaker	04/24/15 09:11	Retrieve from Storage
JB92815-3.1	Todd Shoemaker	Krimesh Patel	04/24/15 09:14	Custody Transfer
JB92815-3.1	Krimesh Patel	Secured Storage	04/24/15 16:50	Return to Storage
JB92815-3.1	Secured Storage	Alfredo Crespo	04/30/15 08:46	Retrieve from Storage
JB92815-3.1	Alfredo Crespo	Secured Staging Area	04/30/15 08:46	Return to Storage
JB92815-3.1	Secured Staging Area	Jayshree Amin	04/30/15 08:50	Retrieve from Storage
JB92815-3.1	Jayshree Amin	Secured Storage	04/30/15 16:49	Return to Storage
JB92815-3.2	Secured Storage	Todd Shoemaker	04/24/15 11:55	Retrieve from Storage
JB92815-3.2	Todd Shoemaker	Secured Staging Area	04/24/15 11:55	Return to Storage
JB92815-3.2	Secured Staging Area	Michael Obasidey	04/24/15 14:44	Retrieve from Storage
JB92815-3.2	Michael Obasidey	Masooda Sultani	04/25/15 13:14	Custody Transfer
JB92815-3.2	Masooda Sultani	Secured Storage	04/25/15 14:13	Return to Storage
JB92815-3.2.1	Michael Obasidey	Metals Digestion	04/24/15 14:52	Digestate from JB92815-3.2
JB92815-3.2.1	Metals Digestion	Michael Obasidey	04/24/15 14:52	Digestate from JB92815-3.2
JB92815-3.2.1	Michael Obasidey	Metals Digestate Storage	04/24/15 14:52	Return to Storage
JB92815-3.2.1	Metals Digestate Storage	Kyle Kroeze	04/27/15 18:56	Retrieve from Storage
JB92815-3.2.1	Kyle Kroeze	Metals Digestate Storage	04/27/15 18:57	Return to Storage

## Accutest Internal Chain of Custody

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**Job Number:** JB92815  
**Account:** CORNNYM Cornerstone Environmental Group, LLC  
**Project:** E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ  
**Received:** 04/20/15

Sample/Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JB92815-3.4	Secured Storage	Todd Shoemaker	04/29/15 11:31	Retrieve from Storage
JB92815-3.4	Todd Shoemaker	Brian Schneller	04/29/15 11:33	Custody Transfer
JB92815-3.4	Brian Schneller	Secured Storage	04/29/15 18:29	Return to Storage
JB92815-3.5	Secured Storage	Lucas Schneider	04/20/15 21:08	Retrieve from Storage
JB92815-3.5	Lucas Schneider	Secured Storage	04/20/15 22:40	Return to Storage
JB92815-3.5	Secured Storage	Todd Shoemaker	04/21/15 14:16	Retrieve from Storage
JB92815-3.5	Todd Shoemaker	Jeremy Miles	04/21/15 15:23	Custody Transfer
JB92815-3.5	Jeremy Miles	Secured Storage	04/21/15 23:29	Return to Storage
JB92815-3.5	Secured Storage	Alfredo Crespo	04/29/15 07:56	Retrieve from Storage
JB92815-3.5	Alfredo Crespo	Secured Staging Area	04/29/15 07:56	Return to Storage
JB92815-3.5	Secured Staging Area	Chris Brunson	04/29/15 08:49	Retrieve from Storage
JB92815-3.5	Shirley Grzybowski	Secured Storage	04/29/15 15:04	Return to Storage
Analyst unavailable for custody transfer.				
JB92815-3.5	Secured Storage	Alfredo Crespo	04/30/15 07:20	Retrieve from Storage
JB92815-3.5	Alfredo Crespo	Secured Staging Area	04/30/15 07:20	Return to Storage
JB92815-3.5	Secured Staging Area	Alfredo Crespo	04/30/15 09:06	Retrieve from Storage
JB92815-3.5	Alfredo Crespo	Secured Storage	04/30/15 09:06	Return to Storage
JB92815-3.5	Secured Storage	Gage Donahue	04/30/15 09:40	Retrieve from Storage
JB92815-3.5	Gage Donahue	Secured Staging Area	04/30/15 09:40	Return to Storage
JB92815-3.5	Secured Staging Area	Jayshree Amin	04/30/15 09:44	Retrieve from Storage
JB92815-3.5	Jayshree Amin	Secured Storage	04/30/15 16:49	Return to Storage
JB92815-3.6	Secured Storage	Nicole Horvath	04/23/15 10:41	Retrieve from Storage
JB92815-3.6	Nicole Horvath	GCMSU	04/23/15 10:41	Load on Instrument
JB92815-3.6	GCMSU	Nicole Horvath	04/24/15 09:18	Unload from Instrument
JB92815-3.6	Nicole Horvath	Secured Storage	04/24/15 09:18	Return to Storage
JB92815-3.9	Secured Storage	Bernadette Vassilatos	04/29/15 13:14	Retrieve from Storage
JB92815-3.9	Bernadette Vassilatos		04/29/15 13:15	Subcontract
JB92815-3F.3	Secured Storage	Todd Shoemaker	04/24/15 11:55	Retrieve from Storage
JB92815-3F.3	Todd Shoemaker	Secured Staging Area	04/24/15 11:55	Return to Storage
JB92815-3F.3	Secured Staging Area	Michael Obasidey	04/24/15 14:44	Retrieve from Storage
JB92815-3F.3	Michael Obasidey	Masooda Sultani	04/25/15 13:14	Custody Transfer
JB92815-3F.3	Masooda Sultani	Secured Storage	04/25/15 14:13	Return to Storage
JB92815-3F.3.1	Michael Obasidey	Metals Digestion	04/24/15 14:52	Digestate from JB92815-3F.3
JB92815-3F.3.1	Metals Digestion	Michael Obasidey	04/24/15 14:52	Digestate from JB92815-3F.3
JB92815-3F.3.1	Michael Obasidey	Metals Digestate Storage	04/24/15 14:52	Return to Storage
JB92815-3F.3.1	Metals Digestate Storage	Kyle Kroeze	04/27/15 18:56	Retrieve from Storage
JB92815-3F.3.1	Kyle Kroeze	Metals Digestate Storage	04/27/15 18:57	Return to Storage
JB92815-4.1	Secured Storage	Todd Shoemaker	04/24/15 09:11	Retrieve from Storage

## Accutest Internal Chain of Custody

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**Job Number:** JB92815  
**Account:** CORNNYM Cornerstone Environmental Group, LLC  
**Project:** E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ  
**Received:** 04/20/15

Sample/Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JB92815-4.1	Todd Shoemaker	Krimesh Patel	04/24/15 09:14	Custody Transfer
JB92815-4.1	Krimesh Patel	Secured Storage	04/24/15 16:50	Return to Storage
JB92815-4.1	Secured Storage	Alfredo Crespo	04/30/15 08:46	Retrieve from Storage
JB92815-4.1	Alfredo Crespo	Secured Staging Area	04/30/15 08:46	Return to Storage
JB92815-4.1	Secured Staging Area	Jayshree Amin	04/30/15 08:50	Retrieve from Storage
JB92815-4.1	Jayshree Amin	Secured Storage	04/30/15 16:49	Return to Storage
JB92815-4.2	Secured Storage	Todd Shoemaker	04/24/15 11:55	Retrieve from Storage
JB92815-4.2	Todd Shoemaker	Secured Staging Area	04/24/15 11:55	Return to Storage
JB92815-4.2	Secured Staging Area	Michael Obasidey	04/24/15 14:44	Retrieve from Storage
JB92815-4.2	Michael Obasidey	Masooda Sultani	04/25/15 13:14	Custody Transfer
JB92815-4.2	Masooda Sultani	Secured Storage	04/25/15 14:13	Return to Storage
JB92815-4.2.1	Michael Obasidey	Metals Digestion	04/24/15 14:52	Digestate from JB92815-4.2
JB92815-4.2.1	Metals Digestion	Michael Obasidey	04/24/15 14:52	Digestate from JB92815-4.2
JB92815-4.2.1	Michael Obasidey	Metals Digestate Storage	04/24/15 14:52	Return to Storage
JB92815-4.2.1	Metals Digestate Storage	Kyle Kroeze	04/27/15 18:56	Retrieve from Storage
JB92815-4.2.1	Kyle Kroeze	Metals Digestate Storage	04/27/15 18:57	Return to Storage
JB92815-4.4	Secured Storage	Todd Shoemaker	04/29/15 11:31	Retrieve from Storage
JB92815-4.4	Todd Shoemaker	Brian Schneller	04/29/15 11:33	Custody Transfer
JB92815-4.4	Brian Schneller	Secured Storage	04/29/15 18:29	Return to Storage
JB92815-4.5	Secured Storage	Lucas Schneider	04/20/15 21:08	Retrieve from Storage
JB92815-4.5	Lucas Schneider	Secured Storage	04/20/15 22:40	Return to Storage
JB92815-4.5	Secured Storage	Todd Shoemaker	04/21/15 14:16	Retrieve from Storage
JB92815-4.5	Todd Shoemaker	Jeremy Miles	04/21/15 15:23	Custody Transfer
JB92815-4.5	Jeremy Miles	Secured Storage	04/21/15 23:29	Return to Storage
JB92815-4.5	Secured Storage	Alfredo Crespo	04/29/15 07:56	Retrieve from Storage
JB92815-4.5	Alfredo Crespo	Secured Staging Area	04/29/15 07:56	Return to Storage
JB92815-4.5	Secured Staging Area	Chris Brunson	04/29/15 08:49	Retrieve from Storage
JB92815-4.5	Shirley Grzybowski	Secured Storage	04/29/15 15:04	Return to Storage
Analyst unavailable for custody transfer.				
JB92815-4.5	Secured Storage	Alfredo Crespo	04/30/15 07:20	Retrieve from Storage
JB92815-4.5	Alfredo Crespo	Secured Staging Area	04/30/15 07:20	Return to Storage
JB92815-4.5	Secured Staging Area	Alfredo Crespo	04/30/15 09:06	Retrieve from Storage
JB92815-4.5	Alfredo Crespo	Secured Storage	04/30/15 09:06	Return to Storage
JB92815-4.5	Secured Storage	Gage Donahue	04/30/15 09:40	Retrieve from Storage
JB92815-4.5	Gage Donahue	Secured Staging Area	04/30/15 09:40	Return to Storage
JB92815-4.5	Secured Staging Area	Jayshree Amin	04/30/15 09:44	Retrieve from Storage
JB92815-4.5	Jayshree Amin	Secured Storage	04/30/15 16:49	Return to Storage
JB92815-4.6	Secured Storage	Nicole Horvath	04/23/15 10:41	Retrieve from Storage
JB92815-4.6	Nicole Horvath	GCMSU	04/23/15 10:41	Load on Instrument

## Accutest Internal Chain of Custody

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Job Number: JB92815

Account: CORNNYM Cornerstone Environmental Group, LLC

Project: E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ

Received: 04/20/15

Sample/Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JB92815-4.6	GCMSU	Nicole Horvath	04/24/15 09:18	Unload from Instrument
JB92815-4.6	Nicole Horvath	Secured Storage	04/24/15 09:18	Return to Storage
JB92815-4.8	Secured Storage	Bernadette Vassilatos	04/29/15 13:14	Retrieve from Storage
JB92815-4.8	Bernadette Vassilatos		04/29/15 13:15	Subcontract
JB92815-4F.3	Secured Storage	Todd Shoemaker	04/24/15 11:55	Retrieve from Storage
JB92815-4F.3	Todd Shoemaker	Secured Staging Area	04/24/15 11:55	Return to Storage
JB92815-4F.3	Secured Staging Area	Michael Obasidey	04/24/15 14:44	Retrieve from Storage
JB92815-4F.3	Michael Obasidey	Masooda Sultani	04/25/15 13:14	Custody Transfer
JB92815-4F.3	Masooda Sultani	Secured Storage	04/25/15 14:13	Return to Storage
JB92815-4F.3.1	Michael Obasidey	Metals Digestion	04/24/15 14:52	Digestate from JB92815-4F.3
JB92815-4F.3.1	Metals Digestion	Michael Obasidey	04/24/15 14:52	Digestate from JB92815-4F.3
JB92815-4F.3.1	Michael Obasidey	Metals Digestate Storage	04/24/15 14:52	Return to Storage
JB92815-4F.3.1	Metals Digestate Storage	Kyle Kroeze	04/27/15 18:56	Retrieve from Storage
JB92815-4F.3.1	Kyle Kroeze	Metals Digestate Storage	04/27/15 18:57	Return to Storage



05/08/15

Technical Report for

Cornerstone Environmental Group, LLC

E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ

Accutest Job Number: JB92906

Sampling Date: 04/21/15

Report to:

Cornerstone Environmental  
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ATTN: Tim Rooper

Total number of pages in report: **459**



Test results contained within this data package meet the requirements  
of the National Environmental Laboratory Accreditation Program  
and/or state specific certification programs as applicable.

*Nancy F. Cole*

Nancy Cole  
Laboratory Director

Client Service contact: Marie Meidhof 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, IL, IN, KS, KY, LA, MA, MD, MI, MT, NC,  
OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TN, VA, WV, DoD ELAP (L-A-B L2248)

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Test results relate only to samples analyzed.

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## Sample Summary

Cornerstone Environmental Group, LLC

Job No: JB92906

E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ

Sample Number	Collected Date	Time By	Matrix Received	Code Type	Client Sample ID	
JB92906-1	04/21/15	09:25 DW	04/21/15	AQ	Ground Water	OB-20A-042115
JB92906-1F	04/21/15	09:25 DW	04/21/15	AQ	Groundwater Filtered	OB-20A-042115
JB92906-2	04/21/15	15:35 DW	04/21/15	AQ	Trip Blank Water	TB-042115
JB92906-3	04/21/15	13:15 DW	04/21/15	AQ	Ground Water	OB-20B-042115
JB92906-3F	04/21/15	13:15 DW	04/21/15	AQ	Groundwater Filtered	OB-20B-042115
JB92906-4	04/21/15	15:35 DW	04/21/15	AQ	Ground Water	OB-27-042115
JB92906-4F	04/21/15	15:35 DW	04/21/15	AQ	Groundwater Filtered	OB-27-042115



## CASE NARRATIVE / CONFORMANCE SUMMARY

**Client:** Cornerstone Environmental Group, LLC

**Job No** JB92906

**Site:** E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ

**Report Date** 5/6/2015 8:21:12 AM

On 04/21/2015, 3 Sample(s), 1 Trip Blank(s) and 0 Field Blank(s) were received at Accutest Laboratories at a temperature of 1.1 C. Samples were intact and chemically preserved, unless noted below. An Accutest Job Number of JB92906 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

### Volatiles by GCMS By Method SW846 8260C

**Matrix:** AQ

**Batch ID:** V3A6097

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB92906-3MS, JB92906-3MSD were used as the QC samples indicated.
- Matrix Spike Recovery(s) for 1,1,1-Trichloroethane, 1,1,2,2-Tetrachloroethane, 1,1-Dichloroethane, 1,2,4-Trichlorobenzene, 1,2-Dibromoethane, 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, Bromoform, Carbon disulfide, Carbon tetrachloride, Chlorobenzene, Chloroform, cis-1,2-Dichloroethene, Cyclohexane, Dibromochloromethane, Freon 113, Isopropylbenzene, Styrene, Tetrachloroethene, Toluene, trans-1,2-Dichloroethene, Xylene (total) are outside control limits. Outside in house control limits.
- RPD(s) for MSD for 1,1,1-Trichloroethane, 1,1,2,2-Tetrachloroethane, 1,1,2-Trichloroethane, 1,1-Dichloroethane, 1,1-Dichloroethene, 1,2,4-Trichlorobenzene, 1,2-Dibromo-3-chloropropane, 1,2-Dibromoethane, 1,2-Dichlorobenzene, 1,2-Dichloroethane, 1,2-Dichloropropane, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 2-Butanone (MEK), 2-Hexanone, 4-Methyl-2-pentanone(MIBK), Acetone, Benzene, Bromodichloromethane, Bromoform, Carbon disulfide, Carbon tetrachloride, Chlorobenzene, Chloroform, cis-1,2-Dichloroethene, cis-1,3-Dichloropropene, Cyclohexane, Dibromochloromethane, Ethylbenzene, Freon 113, Isopropylbenzene, Methyl Acetate, Methyl Tert Butyl Ether, Methylcyclohexane, Methylene chloride, Styrene, Tetrachloroethene, Toluene, trans-1,2-Dichloroethene, trans-1,3-Dichloropropene, Trichloroethene, Xylene (total) are outside control limits for sample JB92906-3MSD. Outside in house control limits.

### Metals By Method SW846 6010C

**Matrix:** AQ

**Batch ID:** MP86033

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB93186-1MS, JB93186-1MSD, JB93186-1SDL were used as the QC samples for metals.
- Matrix Spike Duplicate Recovery(s) for Iron are outside control limits. Spike recovery indicates possible matrix interference.

### Wet Chemistry By Method EPA 300/SW846 9056A

**Matrix:** AQ

**Batch ID:** F-GP25927

- The data for EPA 300/SW846 9056A meets quality control requirements.
- JB92906-1 for Sulfate: Analysis performed at Accutest Laboratories, Orlando FL.
- JB92906-3 for Chloride: Analysis performed at Accutest Laboratories, Orlando FL.
- JB92906-3 for Sulfate: Analysis performed at Accutest Laboratories, Orlando FL.
- JB92906-4 for Chloride: Analysis performed at Accutest Laboratories, Orlando FL.
- JB92906-4 for Sulfate: Analysis performed at Accutest Laboratories, Orlando FL.
- JB92906-1 for Chloride: Analysis performed at Accutest Laboratories, Orlando FL.

## Wet Chemistry By Method EPA 353.2/LACHAT

**Matrix:** AQ

**Batch ID:** GP88673

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB93213-2DUP, JB93213-2MS were used as the QC samples for Nitrogen, Nitrate + Nitrite.

## Wet Chemistry By Method EPA353.2/SM4500NO2B

**Matrix:** AQ

**Batch ID:** R143458

- The data for EPA353.2/SM4500NO2B meets quality control requirements.
- JB92906-1 for Nitrogen, Nitrate: Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

**Matrix:** AQ

**Batch ID:** R143459

- The data for EPA353.2/SM4500NO2B meets quality control requirements.
- JB92906-3 for Nitrogen, Nitrate: Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

**Matrix:** AQ

**Batch ID:** R143460

- The data for EPA353.2/SM4500NO2B meets quality control requirements.
- JB92906-4 for Nitrogen, Nitrate: Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

## Wet Chemistry By Method SM2320 B-11

**Matrix:** AQ

**Batch ID:** GN24558

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB93577-1DUP were used as the QC samples for Alkalinity, Total as CaCO<sub>3</sub>.

## Wet Chemistry By Method SM2540 C-11

**Matrix:** AQ

**Batch ID:** GN24122

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB92906-1DUP were used as the QC samples for Solids, Total Dissolved.

## Wet Chemistry By Method SM4500CO2 D-11

**Matrix:** AQ

**Batch ID:** GN24568

- The data for SM4500CO2 D-11 meets quality control requirements.

## Wet Chemistry By Method SM4500NO2 B-11

**Matrix:** AQ

**Batch ID:** GN23817

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB92823-5DUP, JB92823-5MS were used as the QC samples for Nitrogen, Nitrite.

Accutest certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting Accutest's Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

Accutest Laboratories is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by Accutest Laboratories indicated via signature on the report cover

## SAMPLE DELIVERY GROUP CASE NARRATIVE

**Client:** Accutest New Jersey

**Job No:** JB92906

**Site:** CORNNYM: E203361 Ford Ringwood, Peters Mine Road,

**Report Date:** 5/5/2015 11:12:30 PM

3 Sample(s) were collected on 04/21/2015 and were received at Accutest SE on 04/30/2015 properly preserved, at 2.8 Deg. C and intact. These Samples received an Accutest job number of JB92906. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

### Wet Chemistry By Method EPA 300/SW846 9056A

**Matrix:** AQ

**Batch ID:** GP25927

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) JB92815-4MS, JB92815-4MSD were used as the QC samples for Chloride and Sulfate.

Accutest Laboratories Southeast (ALSE) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALSE and as stated on the COC. ALSE certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the ALSE Quality Manual except as noted above. This report is to be used in its entirety. ALSE is not responsible for any assumptions of data quality if partial data packages are used.

Narrative prepared by:

Date: May 5, 2015

Kim Benham, Client Services (signature on file)

## Summary of Hits

Page 1 of 2

Job Number: JB92906

Account: Cornerstone Environmental Group, LLC

Project: E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ

Collected: 04/21/15

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Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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### JB92906-1 OB-20A-042115

Calcium	29900	5000		ug/l	SW846 6010C
Iron	26800	100		ug/l	SW846 6010C
Alkalinity, Bicarbonate	118	5.0		mg/l	SM4500CO2 D-11
Alkalinity, Total as CaCO3	118	13		mg/l	SM2320 B-11
Chloride <sup>a</sup>	2.2	2.0		mg/l	EPA 300/SW846 9056A
Solids, Total Dissolved	144	10		mg/l	SM2540 C-11

### JB92906-1F OB-20A-042115

Calcium	29600	5000		ug/l	SW846 6010C
Iron	26400	100		ug/l	SW846 6010C

### JB92906-2 TB-042115

No hits reported in this sample.

### JB92906-3 OB-20B-042115

Benzene	0.36 J	0.50	0.24	ug/l	SW846 8260C
Chloroethane	2.4	1.0	0.34	ug/l	SW846 8260C
Cyclohexane	0.86 J	5.0	0.28	ug/l	SW846 8260C
Methylcyclohexane	0.59 J	5.0	0.22	ug/l	SW846 8260C
Total TIC, Volatile	16.6 J			ug/l	
Calcium	61700	5000		ug/l	SW846 6010C
Iron	46700	100		ug/l	SW846 6010C
Magnesium	11500	5000		ug/l	SW846 6010C
Alkalinity, Bicarbonate	230	5.0		mg/l	SM4500CO2 D-11
Alkalinity, Total as CaCO3	230	13		mg/l	SM2320 B-11
Chloride <sup>a</sup>	2.1	2.0		mg/l	EPA 300/SW846 9056A
Solids, Total Dissolved	333	10		mg/l	SM2540 C-11

### JB92906-3F OB-20B-042115

Calcium	60000	5000		ug/l	SW846 6010C
Iron	44800	100		ug/l	SW846 6010C
Magnesium	11100	5000		ug/l	SW846 6010C

### JB92906-4 OB-27-042115

Benzene	3.1	0.50	0.24	ug/l	SW846 8260C
Chloroethane	87.2	1.0	0.34	ug/l	SW846 8260C
Cyclohexane	1.8 J	5.0	0.28	ug/l	SW846 8260C
Isopropylbenzene	3.4	1.0	0.23	ug/l	SW846 8260C

## Summary of Hits

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Job Number: JB92906

Account: Cornerstone Environmental Group, LLC

Project: E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ

Collected: 04/21/15

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Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Methylcyclohexane	1.1 J	5.0	0.22	ug/l	SW846 8260C	
Total TIC, Volatile	213.9 J			ug/l		
Calcium	42800	5000		ug/l	SW846 6010C	
Iron	65200	100		ug/l	SW846 6010C	
Magnesium	5810	5000		ug/l	SW846 6010C	
Alkalinity, Bicarbonate	152	5.0		mg/l	SM4500CO2 D-11	
Alkalinity, Total as CaCO3	152	13		mg/l	SM2320 B-11	
Chloride <sup>a</sup>	2.0	2.0		mg/l	EPA 300/SW846 9056A	
Solids, Total Dissolved	256	20		mg/l	SM2540 C-11	

**JB92906-4F      OB-27-042115**

Calcium	42000	5000	ug/l	SW846 6010C
Iron	61200	100	ug/l	SW846 6010C
Magnesium	5770	5000	ug/l	SW846 6010C

(a) Analysis performed at Accutest Laboratories, Orlando FL.



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## Sample Results

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## Report of Analysis

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Accutest Laboratories

**Report of Analysis**

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<b>Client Sample ID:</b>	OB-20A-042115	<b>Date Sampled:</b>	04/21/15
<b>Lab Sample ID:</b>	JB92906-1	<b>Date Received:</b>	04/21/15
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260C		
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1	3A140841.D	1	04/23/15	ZH	n/a	n/a	V3A6097
Run #2							

	<b>Purge Volume</b>
Run #1	5.0 ml
Run #2	

**VOA TCL List (OLM4.2)**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
67-64-1	Acetone	ND	10	3.3	ug/l	
71-43-2	Benzene	ND	0.50	0.24	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	1.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.42	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	5.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.25	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.22	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.19	ug/l	
75-00-3	Chloroethane	ND	1.0	0.34	ug/l	
67-66-3	Chloroform	ND	1.0	0.19	ug/l	
74-87-3	Chloromethane	ND	1.0	0.41	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.99	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.15	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.23	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.19	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.23	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.27	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.90	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.17	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.51	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.27	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.65	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.39	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.52	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.7	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.23	ug/l	

ND = Not detected      MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

<b>Client Sample ID:</b>	OB-20A-042115	<b>Date Sampled:</b>	04/21/15
<b>Lab Sample ID:</b>	JB92906-1	<b>Date Received:</b>	04/21/15
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260C		
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

**VOA TCL List (OLM4.2)**

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.0	1.9	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.22	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.24	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.73	ug/l	
100-42-5	Styrene	ND	1.0	0.27	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.40	ug/l	
108-88-3	Toluene	ND	1.0	0.16	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.21	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.21	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.43	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.15	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		76-120%
17060-07-0	1,2-Dichloroethane-D4	90%		73-122%
2037-26-5	Toluene-D8	95%		84-119%
460-00-4	4-Bromofluorobenzene	99%		78-117%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	3.45	100	ug/l	JB
	Total TIC, Volatile		0	ug/l	
	Total Alkanes		0	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

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<b>Client Sample ID:</b>	OB-20A-042115	<b>Date Sampled:</b>	04/21/15
<b>Lab Sample ID:</b>	JB92906-1	<b>Date Received:</b>	04/21/15
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

**Total Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium	29900	5000	ug/l	1	04/25/15	04/27/15 BS	SW846 6010C <sup>1</sup>	SW846 3010A <sup>2</sup>
Iron	26800	100	ug/l	1	04/25/15	04/27/15 BS	SW846 6010C <sup>1</sup>	SW846 3010A <sup>2</sup>
Magnesium	< 5000	5000	ug/l	1	04/25/15	04/27/15 BS	SW846 6010C <sup>1</sup>	SW846 3010A <sup>2</sup>
Sodium	< 10000	10000	ug/l	1	04/25/15	04/27/15 BS	SW846 6010C <sup>1</sup>	SW846 3010A <sup>2</sup>

(1) Instrument QC Batch: MA36523

(2) Prep QC Batch: MP86033

RL = Reporting Limit

**Report of Analysis**

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<b>Client Sample ID:</b>	OB-20A-042115	<b>Date Sampled:</b>	04/21/15
<b>Lab Sample ID:</b>	JB92906-1	<b>Date Received:</b>	04/21/15
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

**General Chemistry**

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Bicarbonate	118	5.0	mg/l	1	05/01/15	CB	SM4500CO2 D-11
Alkalinity, Total as CaCO <sub>3</sub>	118	13	mg/l	1	05/01/15	CB	SM2320 B-11
Chloride <sup>a</sup>	2.2	2.0	mg/l	1	05/04/15 18:55	AFL	EPA 300/SW846 9056A
Nitrogen, Nitrate <sup>b</sup>	< 0.11	0.11	mg/l	1	04/30/15 17:07	BS	EPA353.2/SM4500NO2B
Nitrogen, Nitrate + Nitrite	< 0.10	0.10	mg/l	1	04/30/15 17:07	BS	EPA 353.2/LACHAT
Nitrogen, Nitrite	< 0.010	0.010	mg/l	1	04/21/15 21:30	JM	SM4500NO2 B-11
Solids, Total Dissolved	144	10	mg/l	1	04/25/15	KP	SM2540 C-11
Sulfate <sup>a</sup>	< 2.0	2.0	mg/l	1	05/04/15 18:55	AFL	EPA 300/SW846 9056A

(a) Analysis performed at Accutest Laboratories, Orlando FL.

(b) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

RL = Reporting Limit

**Report of Analysis**

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<b>Client Sample ID:</b>	OB-20A-042115	<b>Date Sampled:</b>	04/21/15
<b>Lab Sample ID:</b>	JB92906-1F	<b>Date Received:</b>	04/21/15
<b>Matrix:</b>	AQ - Groundwater Filtered	<b>Percent Solids:</b>	n/a
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

**Dissolved Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium	29600	5000	ug/l	1	04/25/15	04/27/15 BS	SW846 6010C <sup>1</sup>	SW846 3010A <sup>2</sup>
Iron	26400	100	ug/l	1	04/25/15	04/27/15 BS	SW846 6010C <sup>1</sup>	SW846 3010A <sup>2</sup>
Magnesium	< 5000	5000	ug/l	1	04/25/15	04/27/15 BS	SW846 6010C <sup>1</sup>	SW846 3010A <sup>2</sup>
Sodium	< 10000	10000	ug/l	1	04/25/15	04/27/15 BS	SW846 6010C <sup>1</sup>	SW846 3010A <sup>2</sup>

(1) Instrument QC Batch: MA36523

(2) Prep QC Batch: MP86033

RL = Reporting Limit

Accutest Laboratories

**Report of Analysis**

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<b>Client Sample ID:</b>	TB-042115	<b>Date Sampled:</b>	04/21/15
<b>Lab Sample ID:</b>	JB92906-2	<b>Date Received:</b>	04/21/15
<b>Matrix:</b>	AQ - Trip Blank Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260C		
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1	3A140832.D	1	04/23/15	ZH	n/a	n/a	V3A6097
Run #2							

	<b>Purge Volume</b>
Run #1	5.0 ml
Run #2	

**VOA TCL List (OLM4.2)**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
67-64-1	Acetone	ND	10	3.3	ug/l	
71-43-2	Benzene	ND	0.50	0.24	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	1.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.42	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	5.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.25	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.22	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.19	ug/l	
75-00-3	Chloroethane	ND	1.0	0.34	ug/l	
67-66-3	Chloroform	ND	1.0	0.19	ug/l	
74-87-3	Chloromethane	ND	1.0	0.41	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.99	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.15	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.23	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.19	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.23	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.27	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.90	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.17	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.51	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.27	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.65	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.39	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.52	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.7	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.23	ug/l	

ND = Not detected      MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

<b>Client Sample ID:</b>	TB-042115	<b>Date Sampled:</b>	04/21/15
<b>Lab Sample ID:</b>	JB92906-2	<b>Date Received:</b>	04/21/15
<b>Matrix:</b>	AQ - Trip Blank Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260C		
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

**VOA TCL List (OLM4.2)**

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.0	1.9	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.22	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.24	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.73	ug/l	
100-42-5	Styrene	ND	1.0	0.27	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.40	ug/l	
108-88-3	Toluene	ND	1.0	0.16	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.21	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.21	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.43	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.15	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		76-120%
17060-07-0	1,2-Dichloroethane-D4	91%		73-122%
2037-26-5	Toluene-D8	97%		84-119%
460-00-4	4-Bromofluorobenzene	98%		78-117%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	3.42	94	ug/l	JB
	Total TIC, Volatile		0	ug/l	
	Total Alkanes		0	ug/l	

ND = Not detected MDL = Method Detection Limit

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RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Accutest Laboratories

**Report of Analysis**

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<b>Client Sample ID:</b>	OB-20B-042115	<b>Date Sampled:</b>	04/21/15
<b>Lab Sample ID:</b>	JB92906-3	<b>Date Received:</b>	04/21/15
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260C		
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1	3A140826.D	1	04/23/15	ZH	n/a	n/a	V3A6097
Run #2							

	<b>Purge Volume</b>
Run #1	5.0 ml
Run #2	

**VOA TCL List (OLM4.2)**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
67-64-1	Acetone	ND	10	3.3	ug/l	
71-43-2	Benzene	0.36	0.50	0.24	ug/l	J
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	1.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.42	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	5.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.25	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.22	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.19	ug/l	
75-00-3	Chloroethane	2.4	1.0	0.34	ug/l	
67-66-3	Chloroform	ND	1.0	0.19	ug/l	
74-87-3	Chloromethane	ND	1.0	0.41	ug/l	
110-82-7	Cyclohexane	0.86	5.0	0.28	ug/l	J
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.99	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.15	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.23	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.19	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.23	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.27	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.90	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.17	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.51	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.27	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.65	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.39	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.52	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.7	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.23	ug/l	

ND = Not detected      MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

<b>Client Sample ID:</b>	OB-20B-042115	<b>Date Sampled:</b>	04/21/15
<b>Lab Sample ID:</b>	JB92906-3	<b>Date Received:</b>	04/21/15
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260C		
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

**VOA TCL List (OLM4.2)**

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.0	1.9	ug/l	
108-87-2	Methylcyclohexane	0.59	5.0	0.22	ug/l	J
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.24	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.73	ug/l	
100-42-5	Styrene	ND	1.0	0.27	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.40	ug/l	
108-88-3	Toluene	ND	1.0	0.16	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.21	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.21	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.43	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.15	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		76-120%
17060-07-0	1,2-Dichloroethane-D4	91%		73-122%
2037-26-5	Toluene-D8	98%		84-119%
460-00-4	4-Bromofluorobenzene	97%		78-117%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
496-11-7	system artifact	3.44	97	ug/l	JB
	Indane	17.65	5.6	ug/l	JN
	1H-Indene-dihydro-methyl- isomer	19.09	5.5	ug/l	J
	C5 alkyl benzene	20.53	5.5	ug/l	J
	Total TIC, Volatile		16.6	ug/l	J
	Total Alkanes		0	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

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<b>Client Sample ID:</b>	OB-20B-042115	<b>Date Sampled:</b>	04/21/15
<b>Lab Sample ID:</b>	JB92906-3	<b>Date Received:</b>	04/21/15
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

**Total Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium	61700	5000	ug/l	1	04/25/15	04/27/15 BS	SW846 6010C <sup>1</sup>	SW846 3010A <sup>2</sup>
Iron	46700	100	ug/l	1	04/25/15	04/27/15 BS	SW846 6010C <sup>1</sup>	SW846 3010A <sup>2</sup>
Magnesium	11500	5000	ug/l	1	04/25/15	04/27/15 BS	SW846 6010C <sup>1</sup>	SW846 3010A <sup>2</sup>
Sodium	< 10000	10000	ug/l	1	04/25/15	04/27/15 BS	SW846 6010C <sup>1</sup>	SW846 3010A <sup>2</sup>

(1) Instrument QC Batch: MA36523

(2) Prep QC Batch: MP86033

RL = Reporting Limit

**Report of Analysis**

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<b>Client Sample ID:</b>	OB-20B-042115	<b>Date Sampled:</b>	04/21/15
<b>Lab Sample ID:</b>	JB92906-3	<b>Date Received:</b>	04/21/15
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

**General Chemistry**

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Bicarbonate	230	5.0	mg/l	1	05/01/15	CB	SM4500CO2 D-11
Alkalinity, Total as CaCO <sub>3</sub>	230	13	mg/l	1	05/01/15	CB	SM2320 B-11
Chloride <sup>a</sup>	2.1	2.0	mg/l	1	05/04/15 19:11	AFL	EPA 300/SW846 9056A
Nitrogen, Nitrate <sup>b</sup>	< 0.11	0.11	mg/l	1	04/30/15 17:08	BS	EPA353.2/SM4500NO2B
Nitrogen, Nitrate + Nitrite	< 0.10	0.10	mg/l	1	04/30/15 17:08	BS	EPA 353.2/LACHAT
Nitrogen, Nitrite	< 0.010	0.010	mg/l	1	04/21/15 21:36	JM	SM4500NO2 B-11
Solids, Total Dissolved	333	10	mg/l	1	04/25/15	KP	SM2540 C-11
Sulfate <sup>a</sup>	< 2.0	2.0	mg/l	1	05/04/15 19:11	AFL	EPA 300/SW846 9056A

(a) Analysis performed at Accutest Laboratories, Orlando FL.

(b) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

RL = Reporting Limit

**Report of Analysis**

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<b>Client Sample ID:</b>	OB-20B-042115	<b>Date Sampled:</b>	04/21/15
<b>Lab Sample ID:</b>	JB92906-3F	<b>Date Received:</b>	04/21/15
<b>Matrix:</b>	AQ - Groundwater Filtered	<b>Percent Solids:</b>	n/a
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

**Dissolved Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium	60000	5000	ug/l	1	04/25/15	04/27/15 BS	SW846 6010C <sup>1</sup>	SW846 3010A <sup>2</sup>
Iron	44800	100	ug/l	1	04/25/15	04/27/15 BS	SW846 6010C <sup>1</sup>	SW846 3010A <sup>2</sup>
Magnesium	11100	5000	ug/l	1	04/25/15	04/27/15 BS	SW846 6010C <sup>1</sup>	SW846 3010A <sup>2</sup>
Sodium	< 10000	10000	ug/l	1	04/25/15	04/27/15 BS	SW846 6010C <sup>1</sup>	SW846 3010A <sup>2</sup>

(1) Instrument QC Batch: MA36523

(2) Prep QC Batch: MP86033

RL = Reporting Limit

Accutest Laboratories

**Report of Analysis**

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<b>Client Sample ID:</b>	OB-27-042115	<b>Date Sampled:</b>	04/21/15
<b>Lab Sample ID:</b>	JB92906-4	<b>Date Received:</b>	04/21/15
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260C		
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1	3A140840.D	1	04/23/15	ZH	n/a	n/a	V3A6097
Run #2							

	<b>Purge Volume</b>
Run #1	5.0 ml
Run #2	

**VOA TCL List (OLM4.2)**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
67-64-1	Acetone	ND	10	3.3	ug/l	
71-43-2	Benzene	3.1	0.50	0.24	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	1.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.42	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	5.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.25	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.22	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.19	ug/l	
75-00-3	Chloroethane	87.2	1.0	0.34	ug/l	
67-66-3	Chloroform	ND	1.0	0.19	ug/l	
74-87-3	Chloromethane	ND	1.0	0.41	ug/l	
110-82-7	Cyclohexane	1.8	5.0	0.28	ug/l	J
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.99	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.15	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.23	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.19	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.23	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.27	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.90	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.17	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.51	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.27	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.65	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.39	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.52	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.7	ug/l	
98-82-8	Isopropylbenzene	3.4	1.0	0.23	ug/l	

ND = Not detected      MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

<b>Client Sample ID:</b>	OB-27-042115	<b>Date Sampled:</b>	04/21/15
<b>Lab Sample ID:</b>	JB92906-4	<b>Date Received:</b>	04/21/15
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260C		
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

**VOA TCL List (OLM4.2)**

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.0	1.9	ug/l	
108-87-2	Methylcyclohexane	1.1	5.0	0.22	ug/l	J
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.24	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.73	ug/l	
100-42-5	Styrene	ND	1.0	0.27	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.40	ug/l	
108-88-3	Toluene	ND	1.0	0.16	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.21	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.21	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.43	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.15	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		76-120%
17060-07-0	1,2-Dichloroethane-D4	93%		73-122%
2037-26-5	Toluene-D8	96%		84-119%
460-00-4	4-Bromofluorobenzene	101%		78-117%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
496-11-7	system artifact	3.45	100	ug/l	JB
	Indane	17.65	12	ug/l	JN
	C4 alkyl benzene	18.03	10	ug/l	J
	C4 alkyl benzene	18.47	15	ug/l	J
	C4 alkyl benzene	19.03	17	ug/l	J
	1H-Indene-dihydro-methyl- isomer	19.09	19	ug/l	J
	1H-indene-dihydro-dimethyl- isomer	19.38	17	ug/l	J
	1H-indene-dihydro-dimethyl- isomer	19.57	17	ug/l	J
91-20-3	Naphthalene	19.89	22	ug/l	JN
	unknown	20.03	9.6	ug/l	J
	1H-indene-dihydro-dimethyl- isomer	20.17	9	ug/l	J
	1H-indene-dihydro-dimethyl- isomer	20.41	18	ug/l	J
	1H-indene-dihydro-dimethyl- isomer	20.67	10	ug/l	J
	1H-Indene-dihydro-trimethyl- isomer	20.82	8.3	ug/l	J

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

<b>Client Sample ID:</b>	OB-27-042115	<b>Date Sampled:</b>	04/21/15
<b>Lab Sample ID:</b>	JB92906-4	<b>Date Received:</b>	04/21/15
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260C		
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

**VOA TCL List (OLM4.2)**

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	1H-Indene-dihydro-trimethyl- isomer	21.13	12	ug/l	J
	Naphthalene, methyl- isomer	21.48	18	ug/l	J
	Total TIC, Volatile		213.9	ug/l	J
	Total Alkanes		0	ug/l	

4.6  
4

ND = Not detected      MDL = Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

**Report of Analysis**

Page 1 of 1

<b>Client Sample ID:</b>	OB-27-042115	<b>Date Sampled:</b>	04/21/15
<b>Lab Sample ID:</b>	JB92906-4	<b>Date Received:</b>	04/21/15
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

**Total Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium	42800	5000	ug/l	1	04/25/15	04/28/15 BS	SW846 6010C <sup>1</sup>	SW846 3010A <sup>2</sup>
Iron	65200	100	ug/l	1	04/25/15	04/28/15 BS	SW846 6010C <sup>1</sup>	SW846 3010A <sup>2</sup>
Magnesium	5810	5000	ug/l	1	04/25/15	04/28/15 BS	SW846 6010C <sup>1</sup>	SW846 3010A <sup>2</sup>
Sodium	< 10000	10000	ug/l	1	04/25/15	04/28/15 BS	SW846 6010C <sup>1</sup>	SW846 3010A <sup>2</sup>

(1) Instrument QC Batch: MA36536

(2) Prep QC Batch: MP86033

RL = Reporting Limit

**Report of Analysis**

Page 1 of 1

<b>Client Sample ID:</b>	OB-27-042115	<b>Date Sampled:</b>	04/21/15
<b>Lab Sample ID:</b>	JB92906-4	<b>Date Received:</b>	04/21/15
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

**General Chemistry**

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Bicarbonate	152	5.0	mg/l	1	05/01/15	CB	SM4500CO2 D-11
Alkalinity, Total as CaCO <sub>3</sub>	152	13	mg/l	1	05/01/15	CB	SM2320 B-11
Chloride <sup>a</sup>	2.0	2.0	mg/l	1	05/04/15 19:28	AFL	EPA 300/SW846 9056A
Nitrogen, Nitrate <sup>b</sup>	< 0.11	0.11	mg/l	1	04/30/15 17:09	BS	EPA353.2/SM4500NO2B
Nitrogen, Nitrate + Nitrite	< 0.10	0.10	mg/l	1	04/30/15 17:09	BS	EPA 353.2/LACHAT
Nitrogen, Nitrite	< 0.010	0.010	mg/l	1	04/21/15 21:36	JM	SM4500NO2 B-11
Solids, Total Dissolved	256	20	mg/l	1	04/25/15	KP	SM2540 C-11
Sulfate <sup>a</sup>	< 2.0	2.0	mg/l	1	05/04/15 19:28	AFL	EPA 300/SW846 9056A

(a) Analysis performed at Accutest Laboratories, Orlando FL.

(b) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

RL = Reporting Limit

**Report of Analysis**

Page 1 of 1

<b>Client Sample ID:</b>	OB-27-042115	<b>Date Sampled:</b>	04/21/15
<b>Lab Sample ID:</b>	JB92906-4F	<b>Date Received:</b>	04/21/15
<b>Matrix:</b>	AQ - Groundwater Filtered	<b>Percent Solids:</b>	n/a
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

**Dissolved Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium	42000	5000	ug/l	1	04/25/15	04/28/15 BS	SW846 6010C <sup>1</sup>	SW846 3010A <sup>2</sup>
Iron	61200	100	ug/l	1	04/25/15	04/28/15 BS	SW846 6010C <sup>1</sup>	SW846 3010A <sup>2</sup>
Magnesium	5770	5000	ug/l	1	04/25/15	04/28/15 BS	SW846 6010C <sup>1</sup>	SW846 3010A <sup>2</sup>
Sodium	< 10000	10000	ug/l	1	04/25/15	04/28/15 BS	SW846 6010C <sup>1</sup>	SW846 3010A <sup>2</sup>

(1) Instrument QC Batch: MA36536

(2) Prep QC Batch: MP86033

RL = Reporting Limit



## Misc. Forms

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5

### Custody Documents and Other Forms

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Includes the following where applicable:

- Chain of Custody
- Sample Tracking Chronicle
- Internal Chain of Custody

CW  
WB

# CHAIN OF CUSTODY

PAGE    OF   

2235 Route 130, Dayton, NJ 08810  
TEL. 732-329-0200 FAX: 732-329-3490  
www.accutest.com

FED-EX Tracking #	Bottle Order Control #
Accutest Quote #	Accutest Job #

JB92906

Client / Reporting Information		Project Information		Requested Analysis ( see TEST CODE sheet)		Matrix Codes	
Company Name <i>Cornerstone Environmental Group</i>	Project Name: <b>E 203361 (Ford Ringwood)</b>	Street <i>Peters Mine Road</i>	Billing Information ( if different from Report to)	Company Name		DW - Drinking Water	
Street Address <i>100 Crystal Run Rd, Suite 101</i>		City <i>Middletown NY 10941</i>	City <i>Ringwood NJ</i>			GW - Ground Water	
City <i>Middletown NY 10941</i>	State <i>ZP</i>	City <i>Ringwood NJ</i>	State <i>NJ</i>			WW - Water	
Project Contact <i>Tim Reeper tim.reeeper@cornerstonegroup.com</i>	Email <i></i>	Project # <i>845-695-0252</i>	Client Purchase Order # <i></i>	Street Address		SW - Surface Water	
Phone # <i>845-695-0252</i>	Fax # <i></i>			City <i></i>		SO - Soil	
Sampler(s) Name(s) <i>Bob Lautenborg and Dr. Wheeler</i>	Phone # <i></i>	Project Manager <i>Tim Reeper</i>	Attention: <i></i>	State <i></i>		SL - Sludge	
				Zip <i></i>		SED - Sediment	
Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection	# of bottles	Number of preserved Bottles	OI - Oil	
1F	OB-20A-042115	4/21/15	09:25 DW GW	8	3 2 1 2	LQ - Other Liquid	
2	TB-042115	4/21/15	- TB	2		SOL - Other Solid	
3F	OB-20B-042115 *	4/21/15	13:15 DW GW	9	4 2 1 2	WP - Wipe	
4F	OB-27-042115	4/21/15	15:35 D3 GW	8	3 2 1 2	FB - Field Blank	
						EB - Equipment Blank	
						RB - Rinse Blank	
						TB - Trip Blank	
						LAB USE ONLY	
Turnaround Time ( Business days)		Data Deliverable Information				Comments / Special Instructions	
<input type="checkbox"/> Std. 10 Business Days <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 3 Day RUSH <input type="checkbox"/> 2 Day RUSH <input type="checkbox"/> 1 Day RUSH <input type="checkbox"/> other Emergency & Rush T/A data available VIA LabLink		Approved By (Accutest PM): / Date: <b>INITIAL ASSESSMENT 2A JRM</b> LABEL VERIFICATION <u>JRM</u> <input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> NYASP Category A <input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> NYASP Category B <input type="checkbox"/> FULLT1 (Level 3+4) <input type="checkbox"/> State Forms <input type="checkbox"/> NJ Reduced <input type="checkbox"/> EDD Format _____ <input type="checkbox"/> Commercial "C" <input type="checkbox"/> Other _____ <small>NJ Data of Known Quality Protocol Reporting Commercial "A" = Results Only, Commercial "B" = Results + QC Summary NJ Reduced = Results + QC Summary + Partial Raw data</small>				* QC VOA via 4/21/15	
Sample Custody must be documented below each time samples change possession, including courier delivery.							
Relinquished By Sampler: <i>1</i>	Date Time: <i>4/21/15</i>	Received By: <i>1605</i>	Relinquished By: <i>2</i>	Date Time: <i>18:35</i>	Received By: <i>2</i>		
Relinquished by Sampler: <i>3</i>	Date Time: <i></i>	Received By: <i>3</i>	Relinquished By: <i>4</i>	Date Time: <i></i>	Received By: <i>4</i>		
Relinquished by: <i>5</i>	Date Time: <i></i>	Received By: <i>5</i>	Custody Seal # <b>957</b> <input checked="" type="checkbox"/> Intact <input type="checkbox"/> Not intact	Preserved when applicable <input type="checkbox"/>	On Ice <i>SN</i>	Cooler Temp <i>2.9C IP</i>	

**JB92906: Chain of Custody**

**Page 1 of 3**



## Accutest Laboratories Sample Receipt Summary

Accutest Job Number: JB92906

Client: \_\_\_\_\_

Project: \_\_\_\_\_

Date / Time Received: 4/21/2015 6:35:00 PM

Delivery Method: \_\_\_\_\_

Airbill #'s: \_\_\_\_\_

Cooler Temps (Initial/Adjusted): #1: (2.9/1.1); 0

**Cooler Security**      Y or N

- |                           |                                     |                          |                       |                                     |                          |
|---------------------------|-------------------------------------|--------------------------|-----------------------|-------------------------------------|--------------------------|
| 1. Custody Seals Present: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 3. COC Present:       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Custody Seals Intact:  | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 4. Smpl Dates/Time OK | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

**Cooler Temperature**      Y or N

- |                              |                                     |                          |
|------------------------------|-------------------------------------|--------------------------|
| 1. Temp criteria achieved:   | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Cooler temp verification: | IR Gun                              |                          |
| 3. Cooler media:             | Ice (Bag)                           |                          |
| 4. No. Coolers:              | 1                                   |                          |

**Quality Control Preservation**      Y or N      N/A

- |                                 |                                     |                          |                          |
|---------------------------------|-------------------------------------|--------------------------|--------------------------|
| 1. Trip Blank present / cooler: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Trip Blank listed on COC:    | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Samples preserved properly:  | <input checked="" type="checkbox"/> | <input type="checkbox"/> |                          |
| 4. VOCs headspace free:         | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

**Sample Integrity - Documentation**

- |  |                                     |                          |
|--|-------------------------------------|--------------------------|
| 1. Sample labels present on bottles:   | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Container labeling complete:        | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Sample container label / COC agree: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

**Sample Integrity - Condition**

- |                                  |                                     |                          |
|----------------------------------|-------------------------------------|--------------------------|
| 1. Sample recvd within HT:       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. All containers accounted for: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Condition of sample:          |                                     |                          |

Intact

**Sample Integrity - Instructions**

- |   |                                     |                                     |
|---|-------------------------------------|-------------------------------------|
| 1. Analysis requested is clear:           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 2. Bottles received for unspecified tests | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 3. Sufficient volume recvd for analysis:  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 4. Compositing instructions clear:        | <input type="checkbox"/>            | <input type="checkbox"/>            |
| 5. Filtering instructions clear:          | <input type="checkbox"/>            | <input type="checkbox"/>            |

Comments

Accutest Laboratories  
V:732.329.02002235 US Highway 130  
F: 732.329.3499Dayton, New Jersey  
www.accutest.com**JB92906: Chain of Custody****Page 2 of 3**

**Job Change Order:**

JB92906

Requested Date:	5/7/2015	Received Date:	4/21/2015
Account Name:	Cornerstone Environmental Grou	Due Date:	5/5/2015
Project Description:	E203361 Ford Ringwood, Peters Mine Road, Ringw	Deliverable:	REDT2
CSR:	mariem	TAT (Days):	14

=====

**Sample #:** JB92906-all      **Change:** Please revise deliverable to FULT1. Also subbed to ALSE.  
**Dept:**

=====

**Above Changes Per:****Date/Time:** 5/7/2015 2:50:01 PM

To Client: This Change Order is confirmation of the revisions, previously discussed with the Accutest Client Service Representative.

Page 1 of 1

**JB92906: Chain of Custody**  
**Page 3 of 3**

Accutest Laboratories

## Internal Sample Tracking Chronicle

Cornerstone Environmental Group, LLC

**Job No:** JB92906

E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ

Sample Number	Method	Analyzed	By	Prepped By	Test Codes
JB92906-1	Collected: 21-APR-15 09:25 By: DW OB-20A-042115			Received: 21-APR-15 By: AS	
JB92906-1	SM4500NO2 B-11	21-APR-15 21:30	JM		NO2
JB92906-1	SW846 8260C	23-APR-15 22:11	ZH		V8260TCL42+
JB92906-1	SM2540 C-11	25-APR-15	KP		TDS
JB92906-1	SW846 6010C	27-APR-15 12:04	BS	25-APR-15 MO	CA,FE,MG,NA
JB92906-1	EPA353.2/SM4500NO2	30-APR-15 17:07	BS		NO3O
JB92906-1	EPA 353.2/LACHAT	30-APR-15 17:07	BS	30-APR-15 BS	NO32
JB92906-1	SM2320 B-11	01-MAY-15	CB		ALK
JB92906-1	SM4500CO2 D-11	01-MAY-15	CB		BIC
JB92906-1	EPA 300/SW846 9056A04-MAY-15	18:55	AFL	04-MAY-15 AFL	CHL,SO4
JB92906-2	Collected: 21-APR-15 15:35 By: DW TB-042115			Received: 21-APR-15 By: AS	
JB92906-2	SW846 8260C	23-APR-15 17:40	ZH		V8260TCL42+
JB92906-3	Collected: 21-APR-15 13:15 By: DW OB-20B-042115			Received: 21-APR-15 By: AS	
JB92906-3	SM4500NO2 B-11	21-APR-15 21:36	JM		NO2
JB92906-3	SW846 8260C	23-APR-15 14:40	ZH		V8260TCL42+
JB92906-3	SM2540 C-11	25-APR-15	KP		TDS
JB92906-3	SW846 6010C	27-APR-15 12:10	BS	25-APR-15 MO	CA,FE,MG,NA
JB92906-3	EPA353.2/SM4500NO2	30-APR-15 17:08	BS		NO3O
JB92906-3	EPA 353.2/LACHAT	30-APR-15 17:08	BS	30-APR-15 BS	NO32
JB92906-3	SM2320 B-11	01-MAY-15	CB		ALK
JB92906-3	SM4500CO2 D-11	01-MAY-15	CB		BIC
JB92906-3	EPA 300/SW846 9056A04-MAY-15	19:11	AFL	04-MAY-15 AFL	CHL,SO4
JB92906-4	Collected: 21-APR-15 15:35 By: DW OB-27-042115			Received: 21-APR-15 By: AS	
JB92906-4	SM4500NO2 B-11	21-APR-15 21:36	JM		NO2
JB92906-4	SW846 8260C	23-APR-15 21:41	ZH		V8260TCL42+
JB92906-4	SM2540 C-11	25-APR-15	KP		TDS
JB92906-4	SW846 6010C	28-APR-15 18:07	BS	25-APR-15 MO	CA,FE,MG,NA
JB92906-4	EPA353.2/SM4500NO2	30-APR-15 17:09	BS		NO3O
JB92906-4	EPA 353.2/LACHAT	30-APR-15 17:09	BS	30-APR-15 BS	NO32

## Internal Sample Tracking Chronicle

Cornerstone Environmental Group, LLC

**Job No:** JB92906

E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ

Sample Number	Method	Analyzed	By	Prepped By	Test Codes
JB92906-4	SM2320 B-11	01-MAY-15	CB		ALK
JB92906-4	SM4500CO2 D-11	01-MAY-15	CB		BIC
JB92906-4	EPA 300/SW846 9056A04-MAY-15 19:28	AFL	04-MAY-15 AFL		CHL,SO4
JB92906-1F Collected: 21-APR-15 09:25 By: DW			Received: 21-APR-15 By: AS		
OB-20A-042115					
JB92906-1F SW846 6010C		27-APR-15 13:35	BS	25-APR-15 MO	CA,FE,MG,NA
JB92906-3F Collected: 21-APR-15 13:15 By: DW			Received: 21-APR-15 By: AS		
OB-20B-042115					
JB92906-3F SW846 6010C		27-APR-15 13:41	BS	25-APR-15 MO	CA,FE,MG,NA
JB92906-4F Collected: 21-APR-15 15:35 By: DW			Received: 21-APR-15 By: AS		
OB-27-042115					
JB92906-4F SW846 6010C		28-APR-15 18:13	BS	25-APR-15 MO	CA,FE,MG,NA

## Accutest Internal Chain of Custody

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**Job Number:** JB92906  
**Account:** CORNNYM Cornerstone Environmental Group, LLC  
**Project:** E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ  
**Received:** 04/21/15

Sample/Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JB92906-1.1	Secured Storage	Gage Donahue	04/25/15 08:00	Retrieve from Storage
JB92906-1.1	Gage Donahue	Secured Staging Area	04/25/15 08:00	Return to Storage
JB92906-1.1	Secured Staging Area	Masooda Sultani	04/25/15 08:54	Retrieve from Storage
JB92906-1.1	Masooda Sultani	Secured Storage	04/25/15 14:13	Return to Storage
JB92906-1.1.1	Masooda Sultani	Metals Digestion	04/25/15 13:25	Digestate from JB92906-1.1
JB92906-1.1.1	Metals Digestion	Michael Obasidey	04/25/15 13:25	Digestate from JB92906-1.1
JB92906-1.1.1	Michael Obasidey	Metals Digestate Storage	04/25/15 13:25	Return to Storage
JB92906-1.1.1	Metals Digestate Storage	Bryan Stokes-Cawley	04/27/15 15:07	Retrieve from Storage
JB92906-1.1.1	Bryan Stokes-Cawley	Metals Digestate Storage	04/27/15 15:08	Return to Storage
JB92906-1.3	Secured Storage	Todd Shoemaker	04/24/15 09:11	Retrieve from Storage
JB92906-1.3	Todd Shoemaker	Krimesh Patel	04/24/15 09:14	Custody Transfer
JB92906-1.3	Krimesh Patel	Secured Storage	04/24/15 16:50	Return to Storage
JB92906-1.3	Secured Storage	Luis Villanueva	04/25/15 08:53	Retrieve from Storage
JB92906-1.3	Luis Villanueva	Secured Staging Area	04/25/15 08:53	Return to Storage
JB92906-1.3	Secured Staging Area	Krimesh Patel	04/25/15 16:20	Retrieve from Storage
JB92906-1.3	Krimesh Patel	Secured Storage	04/25/15 16:54	Return to Storage
JB92906-1.3	Secured Storage	Alfredo Crespo	04/29/15 09:33	Retrieve from Storage
JB92906-1.3	Alfredo Crespo	Secured Staging Area	04/29/15 09:33	Return to Storage
JB92906-1.3	Secured Staging Area	Chris Brunson	04/29/15 09:37	Retrieve from Storage
JB92906-1.3	Shirley Grzybowski	Secured Storage	04/29/15 15:04	Return to Storage
Analyst unavailable for custody transfer.				
JB92906-1.3	Secured Storage	Alfredo Crespo	04/30/15 08:46	Retrieve from Storage
JB92906-1.3	Alfredo Crespo	Secured Staging Area	04/30/15 08:46	Return to Storage
JB92906-1.3	Secured Staging Area	Jayshree Amin	04/30/15 08:50	Retrieve from Storage
JB92906-1.3	Jayshree Amin	Secured Storage	04/30/15 16:49	Return to Storage
JB92906-1.4	Secured Storage	Luis Villanueva	04/30/15 14:12	Retrieve from Storage
JB92906-1.4	Luis Villanueva	Secured Staging Area	04/30/15 14:12	Return to Storage
JB92906-1.4	Secured Staging Area	Brian Schneller	04/30/15 14:19	Retrieve from Storage
JB92906-1.4	Brian Schneller	Secured Storage	04/30/15 18:42	Return to Storage
JB92906-1.5	Secured Storage	Edwin Gonzalez	04/21/15 19:17	Retrieve from Storage
JB92906-1.5	Edwin Gonzalez	Secured Staging Area	04/21/15 19:17	Return to Storage
JB92906-1.5	Secured Staging Area	Jeremy Miles	04/21/15 20:54	Retrieve from Storage
JB92906-1.5	Jeremy Miles	Secured Storage	04/21/15 23:29	Return to Storage
JB92906-1.5	Secured Storage	Alfredo Crespo	04/29/15 07:56	Retrieve from Storage
JB92906-1.5	Alfredo Crespo	Secured Staging Area	04/29/15 07:56	Return to Storage
JB92906-1.5	Secured Staging Area	Chris Brunson	04/29/15 08:49	Retrieve from Storage
JB92906-1.5	Shirley Grzybowski	Secured Storage	04/29/15 15:04	Return to Storage
Analyst unavailable for custody transfer.				
JB92906-1.5	Secured Storage	Alfredo Crespo	04/30/15 07:20	Retrieve from Storage
JB92906-1.5	Alfredo Crespo	Secured Staging Area	04/30/15 07:20	Return to Storage

## Accutest Internal Chain of Custody

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**Job Number:** JB92906  
**Account:** CORNNYM Cornerstone Environmental Group, LLC  
**Project:** E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ  
**Received:** 04/21/15

Sample/Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JB92906-1.5	Secured Staging Area	Alfredo Crespo	04/30/15 09:06	Retrieve from Storage
JB92906-1.5	Alfredo Crespo	Secured Storage	04/30/15 09:06	Return to Storage
JB92906-1.5	Secured Storage	Gage Donahue	04/30/15 09:40	Retrieve from Storage
JB92906-1.5	Gage Donahue	Secured Staging Area	04/30/15 09:40	Return to Storage
JB92906-1.5	Secured Staging Area	Jayshree Amin	04/30/15 09:44	Retrieve from Storage
JB92906-1.5	Jayshree Amin	Secured Storage	04/30/15 16:49	Return to Storage
JB92906-1.5	Secured Storage	Dwayne Johnson	05/01/15 09:41	Retrieve from Storage
JB92906-1.5	Dwayne Johnson	Secured Staging Area	05/01/15 09:42	Return to Storage
JB92906-1.5	Secured Staging Area	Chris Brunson	05/01/15 15:31	Retrieve from Storage
JB92906-1.5	Chris Brunson	Secured Storage	05/01/15 17:32	Return to Storage
JB92906-1.7	Secured Storage	Zobia Hamid	04/23/15 15:26	Retrieve from Storage
JB92906-1.7	Zobia Hamid	GCMS3A	04/23/15 15:26	Load on Instrument
JB92906-1.7	GCMS3A	Zobia Hamid	04/24/15 10:07	Unload from Instrument
JB92906-1.7	Zobia Hamid	Secured Storage	04/24/15 10:07	Return to Storage
JB92906-1.9	Secured Storage	Bernadette Vassilatos	04/29/15 13:14	Retrieve from Storage
JB92906-1.9	Bernadette Vassilatos		04/29/15 13:15	Subcontract
JB92906-1F.2	Secured Storage	Gage Donahue	04/25/15 08:00	Retrieve from Storage
JB92906-1F.2	Gage Donahue	Secured Staging Area	04/25/15 08:00	Return to Storage
JB92906-1F.2	Secured Staging Area	Masooda Sultani	04/25/15 08:54	Retrieve from Storage
JB92906-1F.2	Masooda Sultani	Secured Storage	04/25/15 14:13	Return to Storage
JB92906-1F.2.1	Masooda Sultani	Metals Digestion	04/25/15 13:25	Digestate from JB92906-1F.2
JB92906-1F.2.1	Metals Digestion	Michael Obasidey	04/25/15 13:25	Digestate from JB92906-1F.2
JB92906-1F.2.1	Michael Obasidey	Metals Digestate Storage	04/25/15 13:25	Return to Storage
JB92906-1F.2.1	Metals Digestate Storage	Bryan Stokes-Cawley	04/27/15 15:07	Retrieve from Storage
JB92906-1F.2.1	Bryan Stokes-Cawley	Metals Digestate Storage	04/27/15 15:08	Return to Storage
JB92906-2.2	Secured Storage	Zobia Hamid	04/23/15 15:26	Retrieve from Storage
JB92906-2.2	Zobia Hamid	GCMS3A	04/23/15 15:26	Load on Instrument
JB92906-2.2	GCMS3A	Zobia Hamid	04/24/15 10:07	Unload from Instrument
JB92906-2.2	Zobia Hamid	Secured Storage	04/24/15 10:07	Return to Storage
JB92906-3.1	Secured Storage	Gage Donahue	04/25/15 08:00	Retrieve from Storage
JB92906-3.1	Gage Donahue	Secured Staging Area	04/25/15 08:00	Return to Storage
JB92906-3.1	Secured Staging Area	Masooda Sultani	04/25/15 08:54	Retrieve from Storage
JB92906-3.1	Masooda Sultani	Secured Storage	04/25/15 14:13	Return to Storage
JB92906-3.1.1	Masooda Sultani	Metals Digestion	04/25/15 13:25	Digestate from JB92906-3.1
JB92906-3.1.1	Metals Digestion	Michael Obasidey	04/25/15 13:25	Digestate from JB92906-3.1
JB92906-3.1.1	Michael Obasidey	Metals Digestate Storage	04/25/15 13:25	Return to Storage
JB92906-3.1.1	Metals Digestate Storage	Bryan Stokes-Cawley	04/27/15 15:07	Retrieve from Storage

## Accutest Internal Chain of Custody

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**Job Number:** JB92906  
**Account:** CORNNYM Cornerstone Environmental Group, LLC  
**Project:** E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ  
**Received:** 04/21/15

Sample/Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JB92906-3.1.1	Bryan Stokes-Cawley	Metals Digestate Storage	04/27/15 15:08	Return to Storage
JB92906-3.3	Secured Storage	Todd Shoemaker	04/24/15 09:11	Retrieve from Storage
JB92906-3.3	Todd Shoemaker	Krimesh Patel	04/24/15 09:14	Custody Transfer
JB92906-3.3	Krimesh Patel	Secured Storage	04/24/15 16:50	Return to Storage
JB92906-3.3	Secured Storage	Luis Villanueva	04/25/15 08:53	Retrieve from Storage
JB92906-3.3	Luis Villanueva	Secured Staging Area	04/25/15 08:53	Return to Storage
JB92906-3.3	Secured Staging Area	Krimesh Patel	04/25/15 16:20	Retrieve from Storage
JB92906-3.3	Krimesh Patel	Secured Storage	04/25/15 16:54	Return to Storage
JB92906-3.3	Secured Storage	Alfredo Crespo	04/29/15 09:33	Retrieve from Storage
JB92906-3.3	Alfredo Crespo	Secured Staging Area	04/29/15 09:33	Return to Storage
JB92906-3.3	Secured Staging Area	Chris Brunson	04/29/15 09:37	Retrieve from Storage
JB92906-3.3	Shirley Grzybowski	Secured Storage	04/29/15 15:04	Return to Storage
Analyst unavailable for custody transfer.				
JB92906-3.3	Secured Storage	Alfredo Crespo	04/30/15 08:46	Retrieve from Storage
JB92906-3.3	Alfredo Crespo	Secured Staging Area	04/30/15 08:46	Return to Storage
JB92906-3.3	Secured Staging Area	Jayshree Amin	04/30/15 08:50	Retrieve from Storage
JB92906-3.3	Jayshree Amin	Secured Storage	04/30/15 16:49	Return to Storage
JB92906-3.4	Secured Storage	Luis Villanueva	04/30/15 14:12	Retrieve from Storage
JB92906-3.4	Luis Villanueva	Secured Staging Area	04/30/15 14:12	Return to Storage
JB92906-3.4	Secured Staging Area	Brian Schneller	04/30/15 14:19	Retrieve from Storage
JB92906-3.4	Brian Schneller	Secured Storage	04/30/15 18:42	Return to Storage
JB92906-3.5	Secured Storage	Edwin Gonzalez	04/21/15 19:17	Retrieve from Storage
JB92906-3.5	Edwin Gonzalez	Secured Staging Area	04/21/15 19:17	Return to Storage
JB92906-3.5	Secured Staging Area	Jeremy Miles	04/21/15 20:54	Retrieve from Storage
JB92906-3.5	Jeremy Miles	Secured Storage	04/21/15 23:29	Return to Storage
JB92906-3.5	Secured Storage	Alfredo Crespo	04/29/15 07:56	Retrieve from Storage
JB92906-3.5	Alfredo Crespo	Secured Staging Area	04/29/15 07:56	Return to Storage
JB92906-3.5	Secured Staging Area	Chris Brunson	04/29/15 08:49	Retrieve from Storage
JB92906-3.5	Shirley Grzybowski	Secured Storage	04/29/15 15:04	Return to Storage
Analyst unavailable for custody transfer.				
JB92906-3.5	Secured Storage	Alfredo Crespo	04/30/15 07:20	Retrieve from Storage
JB92906-3.5	Alfredo Crespo	Secured Staging Area	04/30/15 07:20	Return to Storage
JB92906-3.5	Secured Staging Area	Alfredo Crespo	04/30/15 09:06	Retrieve from Storage
JB92906-3.5	Alfredo Crespo	Secured Storage	04/30/15 09:06	Return to Storage
JB92906-3.5	Secured Storage	Gage Donahue	04/30/15 09:40	Retrieve from Storage
JB92906-3.5	Gage Donahue	Secured Staging Area	04/30/15 09:40	Return to Storage
JB92906-3.5	Secured Staging Area	Jayshree Amin	04/30/15 09:44	Retrieve from Storage
JB92906-3.5	Jayshree Amin	Secured Storage	04/30/15 16:49	Return to Storage
JB92906-3.5	Secured Storage	Dwayne Johnson	05/01/15 09:41	Retrieve from Storage
JB92906-3.5	Dwayne Johnson	Secured Staging Area	05/01/15 09:42	Return to Storage
JB92906-3.5	Secured Staging Area	Chris Brunson	05/01/15 15:31	Retrieve from Storage

## Accutest Internal Chain of Custody

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**Job Number:** JB92906  
**Account:** CORNNYM Cornerstone Environmental Group, LLC  
**Project:** E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ  
**Received:** 04/21/15

Sample/Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JB92906-3.5	Chris Brunson	Secured Storage	05/01/15 17:32	Return to Storage
JB92906-3.6	Secured Storage	Zobia Hamid	04/23/15 14:02	Retrieve from Storage
JB92906-3.6	Zobia Hamid	GCMS3A	04/23/15 14:02	Load on Instrument
JB92906-3.6	GCMS3A	Zobia Hamid	04/24/15 10:07	Unload from Instrument
JB92906-3.6	Zobia Hamid	Secured Storage	04/24/15 10:07	Return to Storage
JB92906-3.7	Secured Storage	Zobia Hamid	04/23/15 15:26	Retrieve from Storage
JB92906-3.7	Zobia Hamid	GCMS3A	04/23/15 15:26	Load on Instrument
JB92906-3.7	GCMS3A	Zobia Hamid	04/24/15 10:07	Unload from Instrument
JB92906-3.7	Zobia Hamid	Secured Storage	04/24/15 10:07	Return to Storage
JB92906-3.8	Secured Storage	Zobia Hamid	04/23/15 15:26	Retrieve from Storage
JB92906-3.8	Zobia Hamid	GCMS3A	04/23/15 15:26	Load on Instrument
JB92906-3.8	GCMS3A	Zobia Hamid	04/24/15 10:07	Unload from Instrument
JB92906-3.8	Zobia Hamid	Secured Storage	04/24/15 10:07	Return to Storage
JB92906-3.10	Secured Storage	Bernadette Vassilatos	04/29/15 13:14	Retrieve from Storage
JB92906-3.10	Bernadette Vassilatos		04/29/15 13:15	Subcontract
JB92906-3F.2	Secured Storage	Gage Donahue	04/25/15 08:00	Retrieve from Storage
JB92906-3F.2	Gage Donahue	Secured Staging Area	04/25/15 08:00	Return to Storage
JB92906-3F.2	Secured Staging Area	Masooda Sultani	04/25/15 08:54	Retrieve from Storage
JB92906-3F.2	Masooda Sultani	Secured Storage	04/25/15 14:13	Return to Storage
JB92906-3F.2.1	Masooda Sultani	Metals Digestion	04/25/15 13:25	Digestate from JB92906-3F.2
JB92906-3F.2.1	Metals Digestion	Michael Obasidey	04/25/15 13:25	Digestate from JB92906-3F.2
JB92906-3F.2.1	Michael Obasidey	Metals Digestate Storage	04/25/15 13:25	Return to Storage
JB92906-3F.2.1	Metals Digestate Storage	Bryan Stokes-Cawley	04/27/15 15:07	Retrieve from Storage
JB92906-3F.2.1	Bryan Stokes-Cawley	Metals Digestate Storage	04/27/15 15:08	Return to Storage
JB92906-4.1	Secured Storage	Gage Donahue	04/25/15 08:00	Retrieve from Storage
JB92906-4.1	Gage Donahue	Secured Staging Area	04/25/15 08:00	Return to Storage
JB92906-4.1	Secured Staging Area	Masooda Sultani	04/25/15 08:54	Retrieve from Storage
JB92906-4.1	Masooda Sultani	Secured Storage	04/25/15 14:13	Return to Storage
JB92906-4.1.1	Masooda Sultani	Metals Digestion	04/25/15 13:25	Digestate from JB92906-4.1
JB92906-4.1.1	Metals Digestion	Michael Obasidey	04/25/15 13:25	Digestate from JB92906-4.1
JB92906-4.1.1	Michael Obasidey	Metals Digestate Storage	04/25/15 13:25	Return to Storage
JB92906-4.1.1	Metals Digestate Storage	Bryan Stokes-Cawley	04/27/15 15:07	Retrieve from Storage
JB92906-4.1.1	Bryan Stokes-Cawley	Metals Digestate Storage	04/27/15 15:08	Return to Storage
JB92906-4.3	Secured Storage	Todd Shoemaker	04/24/15 09:11	Retrieve from Storage
JB92906-4.3	Todd Shoemaker	Krimesh Patel	04/24/15 09:14	Custody Transfer

# Accutest Internal Chain of Custody

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**Job Number:** JB92906  
**Account:** CORNNYM Cornerstone Environmental Group, LLC  
**Project:** E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ  
**Received:** 04/21/15

Sample/Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JB92906-4.3	Krimesh Patel	Secured Storage	04/24/15 16:50	Return to Storage
JB92906-4.3	Secured Storage	Luis Villanueva	04/25/15 08:53	Retrieve from Storage
JB92906-4.3	Luis Villanueva	Secured Staging Area	04/25/15 08:53	Return to Storage
JB92906-4.3	Secured Staging Area	Krimesh Patel	04/25/15 16:20	Retrieve from Storage
JB92906-4.3	Krimesh Patel	Secured Storage	04/25/15 16:54	Return to Storage
JB92906-4.3	Secured Storage	Alfredo Crespo	04/29/15 09:33	Retrieve from Storage
JB92906-4.3	Alfredo Crespo	Secured Staging Area	04/29/15 09:33	Return to Storage
JB92906-4.3	Secured Staging Area	Chris Brunson	04/29/15 09:37	Retrieve from Storage
JB92906-4.3	Shirley Grzybowski	Secured Storage	04/29/15 15:04	Return to Storage
Analyst unavailable for custody transfer.				
JB92906-4.3	Secured Storage	Alfredo Crespo	04/30/15 08:46	Retrieve from Storage
JB92906-4.3	Alfredo Crespo	Secured Staging Area	04/30/15 08:46	Return to Storage
JB92906-4.3	Secured Staging Area	Jayshree Amin	04/30/15 08:50	Retrieve from Storage
JB92906-4.3	Jayshree Amin	Secured Storage	04/30/15 16:49	Return to Storage
JB92906-4.4	Secured Storage	Luis Villanueva	04/30/15 14:12	Retrieve from Storage
JB92906-4.4	Luis Villanueva	Secured Staging Area	04/30/15 14:12	Return to Storage
JB92906-4.4	Secured Staging Area	Brian Schneller	04/30/15 14:19	Retrieve from Storage
JB92906-4.4	Brian Schneller	Secured Storage	04/30/15 18:42	Return to Storage
JB92906-4.5	Secured Storage	Edwin Gonzalez	04/21/15 19:17	Retrieve from Storage
JB92906-4.5	Edwin Gonzalez	Secured Staging Area	04/21/15 19:17	Return to Storage
JB92906-4.5	Secured Staging Area	Jeremy Miles	04/21/15 20:54	Retrieve from Storage
JB92906-4.5	Jeremy Miles	Secured Storage	04/21/15 23:29	Return to Storage
JB92906-4.5	Secured Storage	Alfredo Crespo	04/29/15 07:56	Retrieve from Storage
JB92906-4.5	Alfredo Crespo	Secured Staging Area	04/29/15 07:56	Return to Storage
JB92906-4.5	Secured Staging Area	Chris Brunson	04/29/15 08:49	Retrieve from Storage
JB92906-4.5	Shirley Grzybowski	Secured Storage	04/29/15 15:04	Return to Storage
Analyst unavailable for custody transfer.				
JB92906-4.5	Secured Storage	Alfredo Crespo	04/30/15 07:20	Retrieve from Storage
JB92906-4.5	Alfredo Crespo	Secured Staging Area	04/30/15 07:20	Return to Storage
JB92906-4.5	Secured Staging Area	Alfredo Crespo	04/30/15 09:06	Retrieve from Storage
JB92906-4.5	Alfredo Crespo	Secured Storage	04/30/15 09:06	Return to Storage
JB92906-4.5	Secured Storage	Gage Donahue	04/30/15 09:40	Retrieve from Storage
JB92906-4.5	Gage Donahue	Secured Staging Area	04/30/15 09:40	Return to Storage
JB92906-4.5	Secured Staging Area	Jayshree Amin	04/30/15 09:44	Retrieve from Storage
JB92906-4.5	Jayshree Amin	Secured Storage	04/30/15 16:49	Return to Storage
JB92906-4.5	Secured Storage	Dwayne Johnson	05/01/15 09:41	Retrieve from Storage
JB92906-4.5	Dwayne Johnson	Secured Staging Area	05/01/15 09:42	Return to Storage
JB92906-4.5	Secured Staging Area	Chris Brunson	05/01/15 15:31	Retrieve from Storage
JB92906-4.5	Chris Brunson	Secured Storage	05/01/15 17:32	Return to Storage
JB92906-4.6	Secured Storage	Zobia Hamid	04/23/15 15:26	Retrieve from Storage
JB92906-4.6	Zobia Hamid	GCMS3A	04/23/15 15:26	Load on Instrument

## Accutest Internal Chain of Custody

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Job Number: JB92906

Account: CORNNYM Cornerstone Environmental Group, LLC

Project: E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ

Received: 04/21/15

Sample/Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JB92906-4.6	GCMS3A	Zobia Hamid	04/24/15 10:07	Unload from Instrument
JB92906-4.6	Zobia Hamid	Secured Storage	04/24/15 10:07	Return to Storage
JB92906-4.9	Secured Storage	Bernadette Vassilatos	04/29/15 13:14	Retrieve from Storage
JB92906-4.9	Bernadette Vassilatos		04/29/15 13:15	Subcontract
JB92906-4F.2	Secured Storage	Gage Donahue	04/25/15 08:00	Retrieve from Storage
JB92906-4F.2	Gage Donahue	Secured Staging Area	04/25/15 08:00	Return to Storage
JB92906-4F.2	Secured Staging Area	Masooda Sultani	04/25/15 08:54	Retrieve from Storage
JB92906-4F.2	Masooda Sultani	Secured Storage	04/25/15 14:13	Return to Storage
JB92906-4F.2.1	Masooda Sultani	Metals Digestion	04/25/15 13:25	Digestate from JB92906-4F.2
JB92906-4F.2.1	Metals Digestion	Michael Obasidey	04/25/15 13:25	Digestate from JB92906-4F.2
JB92906-4F.2.1	Michael Obasidey	Metals Digestate Storage	04/25/15 13:25	Return to Storage
JB92906-4F.2.1	Metals Digestate Storage	Bryan Stokes-Cawley	04/27/15 15:07	Retrieve from Storage
JB92906-4F.2.1	Bryan Stokes-Cawley	Metals Digestate Storage	04/27/15 15:08	Return to Storage



05/08/15

Technical Report for

Cornerstone Environmental Group, LLC

E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ

Accutest Job Number: JB92926

Sampling Date: 04/21/15

Report to:

Cornerstone Environmental  
100 Crystal Run Road Suite 101  
Middletown, NY 10941  
Tim.Rooper@Cornerstoneeg.com; jtomalia@cadenacp.com  
ATTN: Tim Rooper

Total number of pages in report: **599**



Test results contained within this data package meet the requirements  
of the National Environmental Laboratory Accreditation Program  
and/or state specific certification programs as applicable.

A handwritten signature in black ink that reads "Nancy T. Cole".

Nancy Cole  
Laboratory Director

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Test results relate only to samples analyzed.

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## Sample Summary

Cornerstone Environmental Group, LLC

Job No: JB92926

E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
JB92926-1	04/21/15	17:35 DW	04/21/15	AQ	Ground Water	OB-11R-042115
JB92926-1F	04/21/15	17:35 DW	04/21/15	AQ	Groundwater Filtered	OB-11R-042115
JB92926-2	04/21/15	19:20 DW	04/21/15	AQ	Trip Blank Water	TB-02-042115
JB92926-3	04/21/15	19:20 DW	04/21/15	AQ	Ground Water	RW-6A-042115
JB92926-3F	04/21/15	19:20 DW	04/21/15	AQ	Groundwater Filtered	RW-6A-042115



## CASE NARRATIVE / CONFORMANCE SUMMARY

**Client:** Cornerstone Environmental Group, LLC

**Job No** JB92926

**Site:** E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ

**Report Date** 5/8/2015 3:30:11 PM

On 04/21/2015, 2 Sample(s), 1 Trip Blank(s) and 0 Field Blank(s) were received at Accutest Laboratories at a temperature of 3.9 C. Samples were intact and chemically preserved, unless noted below. An Accutest Job Number of JB92926 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

### Volatiles by GCMS By Method SW846 8260C

**Matrix:** AQ

**Batch ID:** V4V693

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB93164-3MS, JB93164-3MSD were used as the QC samples indicated.

**Matrix:** AQ

**Batch ID:** V4V694

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB93083-1MS, JB93083-1MSD were used as the QC samples indicated.
- RPD(s) for MSD for 1,1,1-Trichloroethane, 1,1,2,2-Tetrachloroethane, 1,1,2-Trichloroethane, 1,1-Dichloroethane, 1,1-Dichloroethene, 1,2,4-Trichlorobenzene, 1,2-Dibromoethane, 1,2-Dichlorobenzene, 1,2-Dichloropropane, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 2-Hexanone, Benzene, Bromodichloromethane, Carbon disulfide, Carbon tetrachloride, Chlorobenzene, Chloroform, cis-1,2-Dichloroethene, cis-1,3-Dichloropropene, Cyclohexane, Ethylbenzene, Isopropylbenzene, Methylen chloride, Styrene, Tetrachloroethene, Toluene, trans-1,2-Dichloroethene, trans-1,3-Dichloropropene, Trichloroethene, Xylene (total) are outside control limits for sample JB93083-1MSD. Outside control limits due to matrix interference.

### Metals By Method SW846 6010C

**Matrix:** AQ

**Batch ID:** MP85979

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB92926-1MS, JB92926-1MSD, JB92926-1SDL were used as the QC samples for metals.

### Wet Chemistry By Method EPA 300/SW846 9056A

**Matrix:** AQ

**Batch ID:** GP88830

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB93213-2MS, JB93213-2DUP were used as the QC samples for Chloride, Sulfate.

## Wet Chemistry By Method EPA 353.2/LACHAT

**Matrix:** AQ

**Batch ID:** GP88674

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB92925-12DUP, JB92925-12MS were used as the QC samples for Nitrogen, Nitrate + Nitrite.

## Wet Chemistry By Method EPA353.2/SM4500NO2B

**Matrix:** AQ

**Batch ID:** R143478

- The data for EPA353.2/SM4500NO2B meets quality control requirements.
- JB92926-1 for Nitrogen, Nitrate: Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

**Matrix:** AQ

**Batch ID:** R143479

- The data for EPA353.2/SM4500NO2B meets quality control requirements.
- JB92926-3 for Nitrogen, Nitrate: Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

## Wet Chemistry By Method SM2320 B-11

**Matrix:** AQ

**Batch ID:** GN24558

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB93577-1DUP were used as the QC samples for Alkalinity, Total as CaCO<sub>3</sub>.

## Wet Chemistry By Method SM2540 C-11

**Matrix:** AQ

**Batch ID:** GN24171

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB92926-3DUP were used as the QC samples for Solids, Total Dissolved.

## Wet Chemistry By Method SM4500CO2 D-11

**Matrix:** AQ

**Batch ID:** GN24568

- The data for SM4500CO2 D-11 meets quality control requirements.

## Wet Chemistry By Method SM4500NO2 B-11

**Matrix:** AQ

**Batch ID:** GN23817

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB92823-5DUP, JB92823-5MS were used as the QC samples for Nitrogen, Nitrite.

Accutest certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting Accutest's Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

Accutest Laboratories is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by Accutest Laboratories indicated via signature on the report cover

## Summary of Hits

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Job Number: JB92926

Account: Cornerstone Environmental Group, LLC

Project: E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ

Collected: 04/21/15

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Lab Sample ID Analyte	Client Sample ID Qual	Result/ RL	MDL	Units	Method
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### JB92926-1      OB-11R-042115

Acetone	11.2	10	3.3	ug/l	SW846 8260C
Benzene	2.9	0.50	0.24	ug/l	SW846 8260C
Chloroethane	21.2	1.0	0.34	ug/l	SW846 8260C
Cyclohexane	2.2 J	5.0	0.28	ug/l	SW846 8260C
Isopropylbenzene	0.81 J	1.0	0.23	ug/l	SW846 8260C
Methylcyclohexane	0.44 J	5.0	0.22	ug/l	SW846 8260C
Total TIC, Volatile	37.1 J			ug/l	
Calcium	56300	5000		ug/l	SW846 6010C
Iron	70000	100		ug/l	SW846 6010C
Magnesium	7150	5000		ug/l	SW846 6010C
Alkalinity, Bicarbonate	205	5.0		mg/l	SM4500CO2 D-11
Alkalinity, Total as CaCO3	205	13		mg/l	SM2320 B-11
Chloride	2.1	2.0		mg/l	EPA 300/SW846 9056A
Solids, Total Dissolved	116	40		mg/l	SM2540 C-11

### JB92926-1F      OB-11R-042115

Calcium	55400	5000		ug/l	SW846 6010C
Iron	68800	100		ug/l	SW846 6010C
Magnesium	7100	5000		ug/l	SW846 6010C

### JB92926-2      TB-02-042115

No hits reported in this sample.

### JB92926-3      RW-6A-042115

Benzene	8.7	0.50	0.24	ug/l	SW846 8260C
Chloroethane	2.3	1.0	0.34	ug/l	SW846 8260C
Cyclohexane	4.2 J	5.0	0.28	ug/l	SW846 8260C
Isopropylbenzene	8.5	1.0	0.23	ug/l	SW846 8260C
Methylcyclohexane	1.5 J	5.0	0.22	ug/l	SW846 8260C
Xylene (total)	37.5	1.0	0.17	ug/l	SW846 8260C
Total TIC, Volatile	79.5 J			ug/l	
Calcium	80700	5000		ug/l	SW846 6010C
Iron	24000	100		ug/l	SW846 6010C
Magnesium	18600	5000		ug/l	SW846 6010C
Alkalinity, Bicarbonate	332	5.0		mg/l	SM4500CO2 D-11
Alkalinity, Total as CaCO3	332	13		mg/l	SM2320 B-11
Chloride	2.8	2.0		mg/l	EPA 300/SW846 9056A
Solids, Total Dissolved	413	10		mg/l	SM2540 C-11

## Summary of Hits

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Job Number: JB92926

Account: Cornerstone Environmental Group, LLC

Project: E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ

Collected: 04/21/15

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Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Analyte						

**JB92926-3F RW-6A-042115**

Calcium	80700	5000		ug/l	SW846 6010C
Iron	23800	100		ug/l	SW846 6010C
Magnesium	18700	5000		ug/l	SW846 6010C



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## Sample Results

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## Report of Analysis

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Accutest Laboratories

**Report of Analysis**

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<b>Client Sample ID:</b>	OB-11R-042115	<b>Date Sampled:</b>	04/21/15
<b>Lab Sample ID:</b>	JB92926-1	<b>Date Received:</b>	04/21/15
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260C		
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1	4V17017.D	1	04/25/15	JM	n/a	n/a	V4V694
Run #2							

	<b>Purge Volume</b>
Run #1	5.0 ml
Run #2	

**VOA TCL List (OLM4.2)**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
67-64-1	Acetone	11.2	10	3.3	ug/l	
71-43-2	Benzene	2.9	0.50	0.24	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	1.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.42	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	5.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.25	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.22	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.19	ug/l	
75-00-3	Chloroethane	21.2	1.0	0.34	ug/l	
67-66-3	Chloroform	ND	1.0	0.19	ug/l	
74-87-3	Chloromethane	ND	1.0	0.41	ug/l	
110-82-7	Cyclohexane	2.2	5.0	0.28	ug/l	J
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.99	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.15	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.23	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.19	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.23	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.27	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.90	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.17	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.51	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.27	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.65	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.39	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.52	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.7	ug/l	
98-82-8	Isopropylbenzene	0.81	1.0	0.23	ug/l	J

ND = Not detected      MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

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<b>Client Sample ID:</b>	OB-11R-042115	<b>Date Sampled:</b>	04/21/15
<b>Lab Sample ID:</b>	JB92926-1	<b>Date Received:</b>	04/21/15
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260C		
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

**VOA TCL List (OLM4.2)**

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.0	1.9	ug/l	
108-87-2	Methylcyclohexane	0.44	5.0	0.22	ug/l	J
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.24	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.73	ug/l	
100-42-5	Styrene	ND	1.0	0.27	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.40	ug/l	
108-88-3	Toluene	ND	1.0	0.16	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.21	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.21	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.43	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.15	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		76-120%
17060-07-0	1,2-Dichloroethane-D4	106%		73-122%
2037-26-5	Toluene-D8	114%		84-119%
460-00-4	4-Bromofluorobenzene	100%		78-117%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	alcohols	6.85	26	ug/l	J
	1H-Indene-dihydro-methyl- isomer	17.89	6	ug/l	J
	1H-indene-dihydro-dimethyl- isomer	18.30	5.1	ug/l	J
	Total TIC, Volatile		37.1	ug/l	J
	Total Alkanes		0	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

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<b>Client Sample ID:</b>	OB-11R-042115	<b>Date Sampled:</b>	04/21/15
<b>Lab Sample ID:</b>	JB92926-1	<b>Date Received:</b>	04/21/15
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

**Total Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium	56300	5000	ug/l	1	04/23/15	04/24/15	ND	SW846 6010C <sup>1</sup>
Iron	70000	100	ug/l	1	04/23/15	04/24/15	ND	SW846 6010C <sup>1</sup>
Magnesium	7150	5000	ug/l	1	04/23/15	04/24/15	ND	SW846 6010C <sup>1</sup>
Sodium	< 10000	10000	ug/l	1	04/23/15	04/24/15	ND	SW846 6010C <sup>1</sup>

(1) Instrument QC Batch: MA36503

(2) Prep QC Batch: MP85979

RL = Reporting Limit

**Report of Analysis**

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<b>Client Sample ID:</b>	OB-11R-042115	<b>Date Sampled:</b>	04/21/15
<b>Lab Sample ID:</b>	JB92926-1	<b>Date Received:</b>	04/21/15
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

**General Chemistry**

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Bicarbonate	205	5.0	mg/l	1	05/01/15	CB	SM4500CO2 D-11
Alkalinity, Total as CaCO <sub>3</sub>	205	13	mg/l	1	05/01/15	CB	SM2320 B-11
Chloride	2.1	2.0	mg/l	1	05/07/15 05:29	HC	EPA 300/SW846 9056A
Nitrogen, Nitrate <sup>a</sup>	< 0.11	0.11	mg/l	1	04/30/15 17:41	BS	EPA353.2/SM4500NO2B
Nitrogen, Nitrate + Nitrite	< 0.10	0.10	mg/l	1	04/30/15 17:41	BS	EPA 353.2/LACHAT
Nitrogen, Nitrite	< 0.010	0.010	mg/l	1	04/21/15 22:22	JM	SM4500NO2 B-11
Solids, Total Dissolved	116	40	mg/l	1	04/26/15	KP	SM2540 C-11
Sulfate	< 10	10	mg/l	1	05/07/15 05:29	HC	EPA 300/SW846 9056A

(a) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

RL = Reporting Limit

**Report of Analysis**

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<b>Client Sample ID:</b>	OB-11R-042115	<b>Date Sampled:</b>	04/21/15
<b>Lab Sample ID:</b>	JB92926-1F	<b>Date Received:</b>	04/21/15
<b>Matrix:</b>	AQ - Groundwater Filtered	<b>Percent Solids:</b>	n/a
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

**Dissolved Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium	55400	5000	ug/l	1	04/23/15	04/24/15	ND	SW846 6010C <sup>1</sup>
Iron	68800	100	ug/l	1	04/23/15	04/24/15	ND	SW846 6010C <sup>1</sup>
Magnesium	7100	5000	ug/l	1	04/23/15	04/24/15	ND	SW846 6010C <sup>1</sup>
Sodium	< 10000	10000	ug/l	1	04/23/15	04/24/15	ND	SW846 6010C <sup>1</sup>

(1) Instrument QC Batch: MA36503

(2) Prep QC Batch: MP85979

RL = Reporting Limit

Accutest Laboratories

**Report of Analysis**

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4.3  
4

<b>Client Sample ID:</b>	TB-02-042115	<b>Date Sampled:</b>	04/21/15
<b>Lab Sample ID:</b>	JB92926-2	<b>Date Received:</b>	04/21/15
<b>Matrix:</b>	AQ - Trip Blank Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260C		
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1	4V16996.D	1	04/24/15	JM	n/a	n/a	V4V693
Run #2							

	<b>Purge Volume</b>
Run #1	5.0 ml
Run #2	

**VOA TCL List (OLM4.2)**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
67-64-1	Acetone	ND	10	3.3	ug/l	
71-43-2	Benzene	ND	0.50	0.24	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	1.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.42	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	5.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.25	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.22	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.19	ug/l	
75-00-3	Chloroethane	ND	1.0	0.34	ug/l	
67-66-3	Chloroform	ND	1.0	0.19	ug/l	
74-87-3	Chloromethane	ND	1.0	0.41	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.99	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.15	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.23	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.19	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.23	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.27	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.90	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.17	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.51	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.27	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.65	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.39	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.52	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.7	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.23	ug/l	

ND = Not detected      MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

<b>Client Sample ID:</b>	TB-02-042115	<b>Date Sampled:</b>	04/21/15
<b>Lab Sample ID:</b>	JB92926-2	<b>Date Received:</b>	04/21/15
<b>Matrix:</b>	AQ - Trip Blank Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260C		
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

**VOA TCL List (OLM4.2)**

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.0	1.9	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.22	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.24	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.73	ug/l	
100-42-5	Styrene	ND	1.0	0.27	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.40	ug/l	
108-88-3	Toluene	ND	1.0	0.16	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.21	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.21	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.43	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.15	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		76-120%
17060-07-0	1,2-Dichloroethane-D4	104%		73-122%
2037-26-5	Toluene-D8	113%		84-119%
460-00-4	4-Bromofluorobenzene	101%		78-117%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
Total TIC, Volatile			0	ug/l	
Total Alkanes			0	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Accutest Laboratories

**Report of Analysis**

Page 1 of 2

<b>Client Sample ID:</b>	RW-6A-042115	<b>Date Sampled:</b>	04/21/15
<b>Lab Sample ID:</b>	JB92926-3	<b>Date Received:</b>	04/21/15
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260C		
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1	4V17018.D	1	04/25/15	JM	n/a	n/a	V4V694
Run #2							

	<b>Purge Volume</b>
Run #1	5.0 ml
Run #2	

**VOA TCL List (OLM4.2)**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
67-64-1	Acetone	ND	10	3.3	ug/l	
71-43-2	Benzene	8.7	0.50	0.24	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	1.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.42	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	5.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.25	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.22	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.19	ug/l	
75-00-3	Chloroethane	2.3	1.0	0.34	ug/l	
67-66-3	Chloroform	ND	1.0	0.19	ug/l	
74-87-3	Chloromethane	ND	1.0	0.41	ug/l	
110-82-7	Cyclohexane	4.2	5.0	0.28	ug/l	J
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.99	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.15	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.23	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.19	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.23	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.27	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.90	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.17	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.51	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.27	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.65	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.39	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.52	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.7	ug/l	
98-82-8	Isopropylbenzene	8.5	1.0	0.23	ug/l	

ND = Not detected      MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

<b>Client Sample ID:</b>	RW-6A-042115	<b>Date Sampled:</b>	04/21/15
<b>Lab Sample ID:</b>	JB92926-3	<b>Date Received:</b>	04/21/15
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260C		
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

**VOA TCL List (OLM4.2)**

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.0	1.9	ug/l	
108-87-2	Methylcyclohexane	1.5	5.0	0.22	ug/l	J
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.24	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.73	ug/l	
100-42-5	Styrene	ND	1.0	0.27	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.40	ug/l	
108-88-3	Toluene	ND	1.0	0.16	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.21	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.21	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.43	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.15	ug/l	
1330-20-7	Xylene (total)	37.5	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		76-120%
17060-07-0	1,2-Dichloroethane-D4	105%		73-122%
2037-26-5	Toluene-D8	113%		84-119%
460-00-4	4-Bromofluorobenzene	100%		78-117%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
96-37-7	Cyclopentane, methyl-	9.08	6.9	ug/l	JN
496-11-7	Indane	16.66	14	ug/l	JN
	C4 alkyl benzene	17.01	9.8	ug/l	J
	C4 alkyl benzene	17.39	9.7	ug/l	J
	C4 alkyl benzene	17.44	7	ug/l	J
	1H-Indene-dihydro-methyl- isomer	17.73	5.2	ug/l	J
	C4 alkyl benzene	17.85	8.2	ug/l	J
	1H-Indene-dihydro-methyl- isomer	17.89	8.7	ug/l	J
91-20-3	Naphthalene	18.53	10	ug/l	JN
	Total TIC, Volatile		79.5	ug/l	J
	Total Alkanes		0	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

Page 1 of 1

<b>Client Sample ID:</b>	RW-6A-042115	<b>Date Sampled:</b>	04/21/15
<b>Lab Sample ID:</b>	JB92926-3	<b>Date Received:</b>	04/21/15
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

**Total Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium	80700	5000	ug/l	1	04/23/15	04/24/15	ND	SW846 6010C <sup>1</sup>
Iron	24000	100	ug/l	1	04/23/15	04/24/15	ND	SW846 6010C <sup>1</sup>
Magnesium	18600	5000	ug/l	1	04/23/15	04/24/15	ND	SW846 6010C <sup>1</sup>
Sodium	< 10000	10000	ug/l	1	04/23/15	04/24/15	ND	SW846 6010C <sup>1</sup>

(1) Instrument QC Batch: MA36503

(2) Prep QC Batch: MP85979

RL = Reporting Limit

**Report of Analysis**

Page 1 of 1

<b>Client Sample ID:</b>	RW-6A-042115	<b>Date Sampled:</b>	04/21/15
<b>Lab Sample ID:</b>	JB92926-3	<b>Date Received:</b>	04/21/15
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

**General Chemistry**

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Bicarbonate	332	5.0	mg/l	1	05/01/15	CB	SM4500CO2 D-11
Alkalinity, Total as CaCO <sub>3</sub>	332	13	mg/l	1	05/01/15	CB	SM2320 B-11
Chloride	2.8	2.0	mg/l	1	05/07/15 05:53	HC	EPA 300/SW846 9056A
Nitrogen, Nitrate <sup>a</sup>	< 0.11	0.11	mg/l	1	04/30/15 17:42	BS	EPA353.2/SM4500NO2B
Nitrogen, Nitrate + Nitrite	< 0.10	0.10	mg/l	1	04/30/15 17:42	BS	EPA 353.2/LACHAT
Nitrogen, Nitrite	< 0.010	0.010	mg/l	1	04/21/15 22:22	JM	SM4500NO2 B-11
Solids, Total Dissolved	413	10	mg/l	1	04/26/15	KP	SM2540 C-11
Sulfate	< 10	10	mg/l	1	05/07/15 05:53	HC	EPA 300/SW846 9056A

(a) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

RL = Reporting Limit

**Report of Analysis**

Page 1 of 1

<b>Client Sample ID:</b>	RW-6A-042115	<b>Date Sampled:</b>	04/21/15
<b>Lab Sample ID:</b>	JB92926-3F	<b>Date Received:</b>	04/21/15
<b>Matrix:</b>	AQ - Groundwater Filtered	<b>Percent Solids:</b>	n/a
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

**Dissolved Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium	80700	5000	ug/l	1	04/23/15	04/24/15	ND	SW846 6010C <sup>1</sup>
Iron	23800	100	ug/l	1	04/23/15	04/24/15	ND	SW846 6010C <sup>1</sup>
Magnesium	18700	5000	ug/l	1	04/23/15	04/24/15	ND	SW846 6010C <sup>1</sup>
Sodium	< 10000	10000	ug/l	1	04/23/15	04/24/15	ND	SW846 6010C <sup>1</sup>
								SW846 3010A <sup>2</sup>

(1) Instrument QC Batch: MA36503

(2) Prep QC Batch: MP85979

RL = Reporting Limit



## Misc. Forms

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### Custody Documents and Other Forms

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Includes the following where applicable:

- Chain of Custody
- Sample Tracking Chronicle
- Internal Chain of Custody

GW  
WB

## CHAIN OF CUSTODY

PAGE \_\_\_\_ OF \_\_\_\_

E

2235 Route 130, Dayton, NJ 08810  
 TEL. 732-329-0200 FAX: 732-329-3499/3480  
 www.accutest.com

FED-EX Tracking #	Bottle Order Control #
Accutest Quote #	Accutest Job #

JB92926

Client / Reporting Information		Project Information		Requested Analysis ( see TEST CODE sheet)										Matrix Codes									
Company Name <i>Cornerstone Environmental Group</i>	Project Name: <i>E203361 (Ford Ringwood)</i>	Street <i>100 Crystal Run Rd, Suite 101</i>	Street <i>Peters Mine Road</i>	Billing Information ( if different from Report to )																			
City <i>Middletown NY 10541</i>	State <i>NJ</i>	City <i>Ringwood</i>	State <i>NJ</i>	Company Name																			
Project Contact <i>Tim Rooper tim.rooper@cornerstonegroup.com</i>	E-mail <i>tim.rooper@cornerstonegroup.com</i>	Project # <i>845-695-0252</i>	Fax # <i>845-695-0252</i>	Street Address																			
Sampler(s) Name(s) <i>Rob Lautenbacher and Dan Wheeler</i>	Phone # <i>845-695-0252</i>	Project Manager <i>Tim Rooper</i>	Attention: <i>Tim Rooper</i>																				
Accutest Sample #	Field ID / Point of Collection	MECH/DIVial #	Date	Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NaCl	Di Water	MECH	ENCORE	TDS	SO4	Chloride	HCO3	Wittate	Al, Alk, Ca, Fe	Dissolved Mg, Na, Ca, Fe	DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB - Field Blank EB - Equipment Blank RB - Rinse Blank TB - Trip Blank
1F	OB-11R-042115		4/21/15	17:35	DW	EW	3	2	1	2						✓	✓	✓	✓	✓	✓	A14	
2	TB-02-042115		4/21/15	-	-	TB	3															G45	
3F	RW-6A-042115		4/21/15	19:20	EW	EW	3	2	1	2						✓	✓	✓	✓	✓	✓	U814	
Turnaround Time ( Business days )				Data Deliverable Information										Comments / Special Instructions									
<input type="checkbox"/> Std. 10 Business Days <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 3 Day RUSH <input type="checkbox"/> 2 Day RUSH <input type="checkbox"/> 1 Day RUSH <input type="checkbox"/> other _____ Emergency & Rush T/A data available VIA Lablink				Approved By (Accutest P/M): Date: <b>INITIAL ASSESSMENT JK 2B</b> <b>LABEL VERIFICATION JK</b> Commercial "A" (Level 1) <input type="checkbox"/> NYASP Category A <input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> NYASP Category B <input type="checkbox"/> FULLT1 (Level 3+4) <input type="checkbox"/> State Forms <input type="checkbox"/> NJ Reduced <input type="checkbox"/> EDD Format _____ Commercial "C" <input type="checkbox"/> Other _____ <i>NJ Data of Known Quality Protocol Reporting</i> Commercial "A" = Results Only, Commercial "B" = Results + QC Summary NJ Reduced = Results + QC Summary + Partial Raw data																			
Sample Custody must be documented below each time samples change possession, including courier delivery.																							
Relinquished by Sampler: <i>1</i>	Date Time: <i>4/21/15 21:30</i>	Received By: <i>Janice Duven</i>	Relinquished By: <i>2</i>	Date Time: <i>2</i>	Received By: <i></i>																		
Relinquished by Sampler: <i>3</i>	Date Time: <i></i>	Received By: <i>3</i>	Relinquished By: <i>4</i>	Date Time: <i></i>	Received By: <i>4</i>																		
Relinquished by: <i>5</i>	Date Time: <i></i>	Received By: <i>5</i>	Custody Seal # <i>767</i>	<input checked="" type="checkbox"/> Intact <input type="checkbox"/> Not intact	Preserved where applicable <i>4/26</i>											On Ice <input checked="" type="checkbox"/>	Cooler Temp. <i>5.7°C</i>						

**JB92926: Chain of Custody**  
**Page 1 of 2**

5.1  
5



## Accutest Laboratories Sample Receipt Summary

Accutest Job Number: JB92926

Client: \_\_\_\_\_

Project: \_\_\_\_\_

Date / Time Received: 4/21/2015 9:35:00 PM

Delivery Method: \_\_\_\_\_

Airbill #'s: \_\_\_\_\_

Cooler Temps (Initial/Adjusted): #1: (5.7/3.9); 0

**Cooler Security**      Y or N

- |                           |                                     |                          |                       |                                     |                          |
|---------------------------|-------------------------------------|--------------------------|-----------------------|-------------------------------------|--------------------------|
| 1. Custody Seals Present: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 3. COC Present:       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Custody Seals Intact:  | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 4. Smpl Dates/Time OK | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

**Cooler Temperature**      Y or N

- |                              |                                     |                          |
|------------------------------|-------------------------------------|--------------------------|
| 1. Temp criteria achieved:   | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Cooler temp verification: | IR Gun                              |                          |
| 3. Cooler media:             | Ice (Bag)                           |                          |
| 4. No. Coolers:              | 1                                   |                          |

**Quality Control Preservation**      Y or N      N/A

- |                                 |                                     |                          |                          |
|---------------------------------|-------------------------------------|--------------------------|--------------------------|
| 1. Trip Blank present / cooler: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Trip Blank listed on COC:    | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Samples preserved properly:  | <input checked="" type="checkbox"/> | <input type="checkbox"/> |                          |
| 4. VOCs headspace free:         | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

**Sample Integrity - Documentation**

- |  |                                     |                          |
|--|-------------------------------------|--------------------------|
| 1. Sample labels present on bottles:   | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Container labeling complete:        | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Sample container label / COC agree: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

**Sample Integrity - Condition**

- |                                  |                                     |                          |
|----------------------------------|-------------------------------------|--------------------------|
| 1. Sample recvd within HT:       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. All containers accounted for: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Condition of sample:          |                                     |                          |

Intact

**Sample Integrity - Instructions**

- |   |                                     |                                     |
|---|-------------------------------------|-------------------------------------|
| 1. Analysis requested is clear:           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 2. Bottles received for unspecified tests | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 3. Sufficient volume recvd for analysis:  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 4. Compositing instructions clear:        | <input type="checkbox"/>            | <input type="checkbox"/>            |
| 5. Filtering instructions clear:          | <input type="checkbox"/>            | <input type="checkbox"/>            |

Comments

Accutest Laboratories  
V:732.329.02002235 US Highway 130  
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www.accutest.com**JB92926: Chain of Custody****Page 2 of 2**

Accutest Laboratories

## Internal Sample Tracking Chronicle

Cornerstone Environmental Group, LLC

**Job No:** JB92926

E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ

Sample Number	Method	Analyzed	By	Prepped By	Test Codes
JB92926-1	Collected: 21-APR-15 17:35 By: DW OB-11R-042115			Received: 21-APR-15 By: AS	
JB92926-1	SM4500NO2 B-11	21-APR-15 22:22	JM		NO2
JB92926-1	SW846 6010C	24-APR-15 04:35	ND	23-APR-15 DP	CA,FE,MG,NA
JB92926-1	SW846 8260C	25-APR-15 14:29	JM		V8260TCL42+
JB92926-1	SM2540 C-11	26-APR-15	KP		TDS
JB92926-1	EPA353.2/SM4500NO2	30-APR-15 17:41	BS		NO3O
JB92926-1	EPA 353.2/LACHAT	30-APR-15 17:41	BS	30-APR-15 BS	NO32
JB92926-1	SM2320 B-11	01-MAY-15	CB		ALK
JB92926-1	SM4500CO2 D-11	01-MAY-15	CB		BIC
JB92926-1	EPA 300/SW846 9056A07-MAY-15	05:29	HC	06-MAY-15 HC	CHL,SO4
JB92926-2	Collected: 21-APR-15 19:20 By: DW TB-02-042115			Received: 21-APR-15 By: AS	
JB92926-2	SW846 8260C	24-APR-15 14:43	JM		V8260TCL42+
JB92926-3	Collected: 21-APR-15 19:20 By: DW RW-6A-042115			Received: 21-APR-15 By: AS	
JB92926-3	SM4500NO2 B-11	21-APR-15 22:22	JM		NO2
JB92926-3	SW846 6010C	24-APR-15 06:25	ND	23-APR-15 DP	CA,FE,MG,NA
JB92926-3	SW846 8260C	25-APR-15 14:55	JM		V8260TCL42+
JB92926-3	SM2540 C-11	26-APR-15	KP		TDS
JB92926-3	EPA353.2/SM4500NO2	30-APR-15 17:42	BS		NO3O
JB92926-3	EPA 353.2/LACHAT	30-APR-15 17:42	BS	30-APR-15 BS	NO32
JB92926-3	SM2320 B-11	01-MAY-15	CB		ALK
JB92926-3	SM4500CO2 D-11	01-MAY-15	CB		BIC
JB92926-3	EPA 300/SW846 9056A07-MAY-15	05:53	HC	06-MAY-15 HC	CHL,SO4
JB92926-1F	Collected: 21-APR-15 17:35 By: DW OB-11R-042115			Received: 21-APR-15 By: AS	
JB92926-1F	SW846 6010C	24-APR-15 06:31	ND	23-APR-15 DP	CA,FE,MG,NA
JB92926-3F	Collected: 21-APR-15 19:20 By: DW RW-6A-042115			Received: 21-APR-15 By: AS	
JB92926-3F	SW846 6010C	24-APR-15 06:37	ND	23-APR-15 DP	CA,FE,MG,NA

## Accutest Internal Chain of Custody

Page 1 of 4

**Job Number:** JB92926  
**Account:** CORNNYM Cornerstone Environmental Group, LLC  
**Project:** E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ  
**Received:** 04/21/15

Sample/Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JB92926-1.1	Secured Storage	Bernadette Vassilatos	04/23/15 06:09	Retrieve from Storage
JB92926-1.1	Bernadette Vassilatos	Secured Staging Area	04/23/15 06:09	Return to Storage
JB92926-1.1	Secured Staging Area	Francis Pandolfo	04/23/15 08:06	Retrieve from Storage
JB92926-1.1	Francis Pandolfo	Darshanaben Patel	04/23/15 10:12	Custody Transfer
JB92926-1.1	Darshanaben Patel	Secured Storage	04/23/15 11:28	Return to Storage
JB92926-1.1.1	Darshanaben Patel	Metals Digestion	04/23/15 11:23	Digestate from JB92926-1.1
JB92926-1.1.1	Metals Digestion	Darshanaben Patel	04/23/15 11:23	Digestate from JB92926-1.1
JB92926-1.1.1	Darshanaben Patel	Metals Digestate Storage	04/23/15 11:23	Return to Storage
JB92926-1.1.1	Metals Digestate Storage	Piyush Patel	04/23/15 18:50	Retrieve from Storage
JB92926-1.1.1	Piyush Patel	Metals Digestate Storage	04/23/15 19:42	Return to Storage
JB92926-1.3	Secured Storage	Todd Shoemaker	04/24/15 09:11	Retrieve from Storage
JB92926-1.3	Todd Shoemaker	Krimesh Patel	04/24/15 09:14	Custody Transfer
JB92926-1.3	Krimesh Patel	Secured Storage	04/24/15 16:50	Return to Storage
JB92926-1.3	Secured Storage	Luis Villanueva	04/25/15 08:53	Retrieve from Storage
JB92926-1.3	Luis Villanueva	Secured Staging Area	04/25/15 08:53	Return to Storage
JB92926-1.3	Secured Staging Area	Krimesh Patel	04/25/15 16:20	Retrieve from Storage
JB92926-1.3	Secured Storage	Gage Donahue	04/25/15 16:49	Retrieve from Storage
Bottle was returned to secure storage, but inadvertently not scanned.				
JB92926-1.3	Gage Donahue	Secured Staging Area	04/25/15 16:49	Return to Storage
JB92926-1.3	Secured Staging Area	Krimesh Patel	04/26/15 12:13	Retrieve from Storage
JB92926-1.3	Krimesh Patel	Secured Storage	04/26/15 15:31	Return to Storage
JB92926-1.3	Secured Storage	Alfredo Crespo	04/29/15 07:56	Retrieve from Storage
JB92926-1.3	Alfredo Crespo	Secured Staging Area	04/29/15 07:56	Return to Storage
JB92926-1.3	Secured Staging Area	Chris Brunson	04/29/15 08:49	Retrieve from Storage
JB92926-1.3	Shirley Grzybowski	Secured Storage	04/29/15 15:04	Return to Storage
Analyst unavailable for custody transfer.				
JB92926-1.3	Secured Storage	Alfredo Crespo	04/30/15 07:20	Retrieve from Storage
JB92926-1.3	Alfredo Crespo	Secured Staging Area	04/30/15 07:20	Return to Storage
JB92926-1.3	Secured Staging Area	Alfredo Crespo	04/30/15 09:06	Retrieve from Storage
JB92926-1.3	Alfredo Crespo	Secured Storage	04/30/15 09:06	Return to Storage
JB92926-1.3	Secured Storage	Gage Donahue	04/30/15 09:40	Retrieve from Storage
JB92926-1.3	Gage Donahue	Secured Staging Area	04/30/15 09:40	Return to Storage
JB92926-1.3	Secured Staging Area	Jayshree Amin	04/30/15 09:44	Retrieve from Storage
JB92926-1.3	Jayshree Amin	Secured Storage	04/30/15 16:49	Return to Storage
JB92926-1.3	Secured Storage	Todd Shoemaker	05/05/15 09:32	Retrieve from Storage
JB92926-1.3	Todd Shoemaker	Hannah Coffin	05/05/15 09:33	Custody Transfer
JB92926-1.3	Hannah Coffin	Secured Storage	05/05/15 16:03	Return to Storage
JB92926-1.3	Secured Storage	Bernadette Vassilatos	05/06/15 08:10	Retrieve from Storage
JB92926-1.3	Bernadette Vassilatos	Secured Staging Area	05/06/15 08:10	Return to Storage
JB92926-1.3	Secured Staging Area	Hannah Coffin	05/06/15 08:40	Retrieve from Storage
JB92926-1.3	Hannah Coffin	Secured Storage	05/06/15 15:44	Return to Storage

## Accutest Internal Chain of Custody

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**Job Number:** JB92926

**Account:** CORNNYM Cornerstone Environmental Group, LLC

**Project:** E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ

**Received:** 04/21/15

5.3  
5

Sample/Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JB92926-1.5	Secured Storage	Dwayne Johnson	05/01/15 09:41	Retrieve from Storage
JB92926-1.5	Dwayne Johnson	Secured Staging Area	05/01/15 09:42	Return to Storage
JB92926-1.5	Secured Staging Area	Chris Brunson	05/01/15 15:31	Retrieve from Storage
JB92926-1.5	Chris Brunson	Secured Storage	05/01/15 17:32	Return to Storage
JB92926-1.6	Secured Storage	Zobia Hamid	04/23/15 15:26	Retrieve from Storage
JB92926-1.6	Zobia Hamid	GCMS3A	04/23/15 15:26	Load on Instrument
JB92926-1.6	GCMS3A	Zobia Hamid	04/24/15 10:07	Unload from Instrument
JB92926-1.6	Zobia Hamid	Secured Storage	04/24/15 10:07	Return to Storage
JB92926-1.7	Secured Storage	Jemima Merilan	04/25/15 13:14	Retrieve from Storage
JB92926-1.7	Jemima Merilan	GCMS4V	04/25/15 13:14	Load on Instrument
JB92926-1.7	GCMS4V	Jemima Merilan	04/28/15 09:21	Unload from Instrument
JB92926-1.7	Jemima Merilan	Secured Storage	04/28/15 09:21	Return to Storage
JB92926-1F.2	Secured Storage	Bernadette Vassilatos	04/23/15 06:09	Retrieve from Storage
JB92926-1F.2	Bernadette Vassilatos	Secured Staging Area	04/23/15 06:09	Return to Storage
JB92926-1F.2	Secured Staging Area	Francis Pandolfo	04/23/15 08:06	Retrieve from Storage
JB92926-1F.2	Francis Pandolfo	Darshanaben Patel	04/23/15 10:12	Custody Transfer
JB92926-1F.2	Darshanaben Patel	Secured Storage	04/23/15 11:28	Return to Storage
JB92926-1F.2.1	Darshanaben Patel	Metals Digestion	04/23/15 11:23	Digestate from JB92926-1F.2
JB92926-1F.2.1	Metals Digestion	Darshanaben Patel	04/23/15 11:23	Digestate from JB92926-1F.2
JB92926-1F.2.1	Darshanaben Patel	Metals Digestate Storage	04/23/15 11:23	Return to Storage
JB92926-1F.2.1	Metals Digestate Storage	Piyush Patel	04/23/15 18:50	Retrieve from Storage
JB92926-1F.2.1	Piyush Patel	Metals Digestate Storage	04/23/15 19:42	Return to Storage
JB92926-2.1	Secured Storage	Jemima Merilan	04/24/15 14:32	Retrieve from Storage
JB92926-2.1	Jemima Merilan	GCMS4V	04/24/15 14:32	Load on Instrument
JB92926-2.1	GCMS4V	Jemima Merilan	04/25/15 11:53	Unload from Instrument
JB92926-2.1	Jemima Merilan	Secured Storage	04/25/15 11:53	Return to Storage
JB92926-2.2	Secured Storage	Zobia Hamid	04/23/15 15:26	Retrieve from Storage
JB92926-2.2	Zobia Hamid	GCMS3A	04/23/15 15:26	Load on Instrument
JB92926-2.2	GCMS3A	Zobia Hamid	04/24/15 10:07	Unload from Instrument
JB92926-2.2	Zobia Hamid	Secured Storage	04/24/15 10:07	Return to Storage
JB92926-3.1	Secured Storage	Bernadette Vassilatos	04/23/15 06:09	Retrieve from Storage
JB92926-3.1	Bernadette Vassilatos	Secured Staging Area	04/23/15 06:09	Return to Storage
JB92926-3.1	Secured Staging Area	Francis Pandolfo	04/23/15 08:06	Retrieve from Storage
JB92926-3.1	Francis Pandolfo	Darshanaben Patel	04/23/15 10:12	Custody Transfer
JB92926-3.1	Darshanaben Patel	Secured Storage	04/23/15 11:28	Return to Storage
JB92926-3.1.1	Darshanaben Patel	Metals Digestion	04/23/15 11:23	Digestate from JB92926-3.1

## Accutest Internal Chain of Custody

Page 3 of 4

**Job Number:** JB92926  
**Account:** CORNNYM Cornerstone Environmental Group, LLC  
**Project:** E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ  
**Received:** 04/21/15

Sample/Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JB92926-3.1.1	Metals Digestion	Darshanaben Patel	04/23/15 11:23	Digestate from JB92926-3.1
JB92926-3.1.1	Darshanaben Patel	Metals Digestate Storage	04/23/15 11:23	Return to Storage
JB92926-3.1.1	Metals Digestate Storage	Piyush Patel	04/23/15 18:50	Retrieve from Storage
JB92926-3.1.1	Piyush Patel	Metals Digestate Storage	04/23/15 19:42	Return to Storage
JB92926-3.3	Secured Storage	Todd Shoemaker	04/24/15 09:11	Retrieve from Storage
JB92926-3.3	Todd Shoemaker	Krimesh Patel	04/24/15 09:14	Custody Transfer
JB92926-3.3	Krimesh Patel	Secured Storage	04/24/15 16:50	Return to Storage
JB92926-3.3	Secured Storage	Luis Villanueva	04/25/15 08:53	Retrieve from Storage
JB92926-3.3	Luis Villanueva	Secured Staging Area	04/25/15 08:53	Return to Storage
JB92926-3.3	Secured Staging Area	Krimesh Patel	04/25/15 16:20	Retrieve from Storage
JB92926-3.3	Secured Storage	Gage Donahue	04/25/15 16:49	Retrieve from Storage
Bottle was returned to secure storage, but inadvertently not scanned.				
JB92926-3.3	Gage Donahue	Secured Staging Area	04/25/15 16:49	Return to Storage
JB92926-3.3	Secured Staging Area	Krimesh Patel	04/26/15 12:13	Retrieve from Storage
JB92926-3.3	Krimesh Patel	Secured Storage	04/26/15 15:31	Return to Storage
JB92926-3.3	Secured Storage	Alfredo Crespo	04/29/15 07:56	Retrieve from Storage
JB92926-3.3	Alfredo Crespo	Secured Staging Area	04/29/15 07:56	Return to Storage
JB92926-3.3	Secured Staging Area	Chris Brunson	04/29/15 08:49	Retrieve from Storage
JB92926-3.3	Shirley Grzybowski	Secured Storage	04/29/15 15:04	Return to Storage
Analyst unavailable for custody transfer.				
JB92926-3.3	Secured Storage	Alfredo Crespo	04/30/15 07:20	Retrieve from Storage
JB92926-3.3	Alfredo Crespo	Secured Staging Area	04/30/15 07:20	Return to Storage
JB92926-3.3	Secured Staging Area	Alfredo Crespo	04/30/15 09:06	Retrieve from Storage
JB92926-3.3	Alfredo Crespo	Secured Storage	04/30/15 09:06	Return to Storage
JB92926-3.3	Secured Storage	Gage Donahue	04/30/15 09:40	Retrieve from Storage
JB92926-3.3	Gage Donahue	Secured Staging Area	04/30/15 09:40	Return to Storage
JB92926-3.3	Secured Staging Area	Jayshree Amin	04/30/15 09:44	Retrieve from Storage
JB92926-3.3	Jayshree Amin	Secured Storage	04/30/15 16:49	Return to Storage
JB92926-3.3	Secured Storage	Todd Shoemaker	05/05/15 09:32	Retrieve from Storage
JB92926-3.3	Todd Shoemaker	Hannah Coffin	05/05/15 09:33	Custody Transfer
JB92926-3.3	Hannah Coffin	Secured Storage	05/05/15 16:03	Return to Storage
JB92926-3.3	Secured Storage	Bernadette Vassilatos	05/06/15 08:10	Retrieve from Storage
JB92926-3.3	Bernadette Vassilatos	Secured Staging Area	05/06/15 08:10	Return to Storage
JB92926-3.3	Secured Staging Area	Hannah Coffin	05/06/15 08:40	Retrieve from Storage
JB92926-3.3	Hannah Coffin	Secured Storage	05/06/15 15:44	Return to Storage
JB92926-3.4	Secured Storage	Luis Villanueva	04/30/15 14:12	Retrieve from Storage
JB92926-3.4	Luis Villanueva	Secured Staging Area	04/30/15 14:12	Return to Storage
JB92926-3.4	Secured Staging Area	Brian Schneller	04/30/15 14:19	Retrieve from Storage
JB92926-3.4	Brian Schneller	Secured Storage	04/30/15 18:42	Return to Storage
JB92926-3.5	Secured Storage	Dwayne Johnson	05/01/15 09:41	Retrieve from Storage
JB92926-3.5	Dwayne Johnson	Secured Staging Area	05/01/15 09:42	Return to Storage

## Accutest Internal Chain of Custody

Page 4 of 4

Job Number: JB92926

Account: CORNNYM Cornerstone Environmental Group, LLC

Project: E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ

Received: 04/21/15

Sample/Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JB92926-3.5	Secured Staging Area	Chris Brunson	05/01/15 15:31	Retrieve from Storage
JB92926-3.5	Chris Brunson	Secured Storage	05/01/15 17:32	Return to Storage
JB92926-3.6	Secured Storage	Jemima Merilan	04/25/15 13:14	Retrieve from Storage
JB92926-3.6	Jemima Merilan	GCMS4V	04/25/15 13:14	Load on Instrument
JB92926-3.6	GCMS4V	Jemima Merilan	04/28/15 09:21	Unload from Instrument
JB92926-3.6	Jemima Merilan	Secured Storage	04/28/15 09:21	Return to Storage
JB92926-3.7	Secured Storage	Zobia Hamid	04/23/15 15:26	Retrieve from Storage
JB92926-3.7	Zobia Hamid	GCMS3A	04/23/15 15:26	Load on Instrument
JB92926-3.7	GCMS3A	Zobia Hamid	04/24/15 10:07	Unload from Instrument
JB92926-3.7	Zobia Hamid	Secured Storage	04/24/15 10:07	Return to Storage
JB92926-3F.2	Secured Storage	Bernadette Vassilatos	04/23/15 06:09	Retrieve from Storage
JB92926-3F.2	Bernadette Vassilatos	Secured Staging Area	04/23/15 06:09	Return to Storage
JB92926-3F.2	Secured Staging Area	Francis Pandolfo	04/23/15 08:06	Retrieve from Storage
JB92926-3F.2	Francis Pandolfo	Darshanaben Patel	04/23/15 10:12	Custody Transfer
JB92926-3F.2	Darshanaben Patel	Secured Storage	04/23/15 11:28	Return to Storage
JB92926-3F.2.1	Darshanaben Patel	Metals Digestion	04/23/15 11:23	Digestate from JB92926-3F.2
JB92926-3F.2.1	Metals Digestion	Darshanaben Patel	04/23/15 11:23	Digestate from JB92926-3F.2
JB92926-3F.2.1	Darshanaben Patel	Metals Digestate Storage	04/23/15 11:23	Return to Storage
JB92926-3F.2.1	Metals Digestate Storage	Piyush Patel	04/23/15 18:50	Retrieve from Storage
JB92926-3F.2.1	Piyush Patel	Metals Digestate Storage	04/23/15 19:42	Return to Storage



05/08/15

Technical Report for

Cornerstone Environmental Group, LLC

E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ

Accutest Job Number: JB93030

Sampling Date: 04/22/15

Report to:

Cornerstone Environmental  
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ATTN: Tim Rooper

Total number of pages in report: **498**



Test results contained within this data package meet the requirements  
of the National Environmental Laboratory Accreditation Program  
and/or state specific certification programs as applicable.

*Nancy T. Cole*

Nancy Cole  
Laboratory Director

Client Service contact: Marie Meidhof 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, IL, IN, KS, KY, LA, MA, MD, MI, MT, NC,  
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## Sample Summary

Cornerstone Environmental Group, LLC

Job No: JB93030

E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ

Sample Number	Collected Date	Time By	Matrix Received	Code Type	Client Sample ID
JB93030-1	04/22/15	16:30 DW	04/22/15	AQ Trip Blank Water	TB-042215
JB93030-2	04/22/15	10:10 DW	04/22/15	AQ Ground Water	SC-1-042215
JB93030-2F	04/22/15	10:10 DW	04/22/15	AQ Groundwater Filtered	SC-1-042215
JB93030-3	04/22/15	12:00 DW	04/22/15	AQ Ground Water	DUP-042215
JB93030-3F	04/22/15	12:00 DW	04/22/15	AQ Groundwater Filtered	DUP-042215
JB93030-4	04/22/15	10:30 RL	04/22/15	AQ Surface Water	PMP-POND-042215
JB93030-5	04/22/15	12:50 DW	04/22/15	AQ Ground Water	RW-6-042215
JB93030-5F	04/22/15	12:50 DW	04/22/15	AQ Groundwater Filtered	RW-6-042215
JB93030-6	04/22/15	15:00 RL	04/22/15	AQ Surface Water	SW-PAB-01A-042215
JB93030-7	04/22/15	15:25 RL	04/22/15	AQ Surface Water	SR-3-SEEP-1-042215
JB93030-8	04/22/15	15:40 RL	04/22/15	AQ Surface Water	SW-PAB-01-042215
JB93030-9	04/22/15	15:40 DW	04/22/15	AQ Ground Water	PMP-50-042215
JB93030-9F	04/22/15	15:40 DW	04/22/15	AQ Groundwater Filtered	PMP-50-042215

**Sample Summary**

(continued)

Cornerstone Environmental Group, LLC

**Job No:** JB93030

E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ

Sample Number	Collected Date	Time By	Matrix Received	Code Type	Client Sample ID
JB93030-10	04/22/15	16:30 RL	04/22/15	AQ	Surface Water



## CASE NARRATIVE / CONFORMANCE SUMMARY

**Client:** Cornerstone Environmental Group, LLC

**Job No** JB93030

**Site:** E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ

**Report Date** 5/8/2015 4:04:50 PM

On 04/22/2015, 9 Sample(s), 1 Trip Blank(s) and 0 Field Blank(s) were received at Accutest Laboratories at a temperature of 2.8 C. Samples were intact and chemically preserved, unless noted below. An Accutest Job Number of JB93030 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

### Volatiles by GCMS By Method SW846 8260C

**Matrix:** AQ

**Batch ID:** V2B5830

- All samples were analyzed within the recommended method holding time.
- Sample(s) JB93030-2MS, JB93030-2MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- RPD(s) for MSD for Chloromethane are outside in house control limits for sample JB93030-2MSD.

### Metals By Method SW846 6010C

**Matrix:** AQ

**Batch ID:** MP86070

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB92931-15AMS, JB92931-15AMSD, JB92931-15ASDL were used as the QC samples for metals.
- RPD(s) for Serial Dilution for Iron are outside control limits for sample MP86070-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

### Wet Chemistry By Method EPA 300/SW846 9056A

**Matrix:** AQ

**Batch ID:** GP88848

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB92983-4DUP, JB93030-9MS were used as the QC samples for Chloride, Sulfate, Chloride.

### Wet Chemistry By Method EPA 353.2/LACHAT

**Matrix:** AQ

**Batch ID:** GP88706

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB92931-11AADUP, JB92931-11AAMS were used as the QC samples for Nitrogen, Nitrate + Nitrite.
- Matrix Spike Recovery(s) for Nitrogen, Nitrate + Nitrite are outside control limits. Spike recovery indicates possible matrix interference.

## Wet Chemistry By Method EPA353.2/SM4500NO2B

**Matrix:** AQ

**Batch ID:** R143540

- The data for EPA353.2/SM4500NO2B meets quality control requirements.
- JB93030-2 for Nitrogen, Nitrate: Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

**Matrix:** AQ

**Batch ID:** R143541

- The data for EPA353.2/SM4500NO2B meets quality control requirements.
- JB93030-3 for Nitrogen, Nitrate: Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

**Matrix:** AQ

**Batch ID:** R143542

- The data for EPA353.2/SM4500NO2B meets quality control requirements.
- JB93030-5 for Nitrogen, Nitrate: Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)
- The data for EPA353.2/SM4500NO2B meets quality control requirements.
- JB93030-9 for Nitrogen, Nitrate: Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

**Matrix:** AQ

**Batch ID:** R143543

- The data for EPA353.2/SM4500NO2B meets quality control requirements.
- JB93030-9 for Nitrogen, Nitrate: Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

## Wet Chemistry By Method SM2320 B-11

**Matrix:** AQ

**Batch ID:** GN24558

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB93577-1DUP were used as the QC samples for Alkalinity, Total as CaCO<sub>3</sub>.

## Wet Chemistry By Method SM2540 C-11

**Matrix:** AQ

**Batch ID:** GN24206

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB93030-9DUP were used as the QC samples for Solids, Total Dissolved.

## Wet Chemistry By Method SM4500CO2 D-11

**Matrix:** AQ

**Batch ID:** GN24568

- The data for SM4500CO2 D-11 meets quality control requirements.

## Wet Chemistry By Method SM4500NO2 B-11

**Matrix:** AQ

**Batch ID:** GN23896

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB92928-5ADUP, JB92928-5AMS were used as the QC samples for Nitrogen, Nitrite.

Accutest certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting Accutest's Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

Accutest Laboratories is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by Accutest Laboratories indicated via signature on the report cover

## Summary of Hits

Page 1 of 3

Job Number: JB93030

Account: Cornerstone Environmental Group, LLC

Project: E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ

Collected: 04/22/15

3

Lab Sample ID Analyte	Client Sample ID Qual	Result/ RL	MDL	Units	Method
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### JB93030-1 TB-042215

No hits reported in this sample.

### JB93030-2 SC-1-042215

Benzene	1.7	0.50	0.24	ug/l	SW846 8260C
Chlorobenzene	0.30 J	1.0	0.19	ug/l	SW846 8260C
Chloroethane	1.8	1.0	0.34	ug/l	SW846 8260C
Cyclohexane	1.7 J	5.0	0.28	ug/l	SW846 8260C
Ethylbenzene	3.3	1.0	0.27	ug/l	SW846 8260C
Isopropylbenzene	1.9	1.0	0.23	ug/l	SW846 8260C
Methylcyclohexane	1.6 J	5.0	0.22	ug/l	SW846 8260C
Toluene	0.48 J	1.0	0.16	ug/l	SW846 8260C
Xylene (total)	75.6	1.0	0.17	ug/l	SW846 8260C
Total TIC, Volatile	31.9 J			ug/l	
Calcium	41000	5000		ug/l	SW846 6010C
Iron	84200	100		ug/l	SW846 6010C
Alkalinity, Bicarbonate	165	5.0		mg/l	SM4500CO2 D-11
Alkalinity, Total as CaCO3	165	13		mg/l	SM2320 B-11
Chloride	2.0	2.0		mg/l	EPA 300/SW846 9056A
Solids, Total Dissolved	160	25		mg/l	SM2540 C-11

### JB93030-2F SC-1-042215

Calcium	41600	5000	ug/l	SW846 6010C
Iron	85800	100	ug/l	SW846 6010C

### JB93030-3 DUP-042215

Benzene	1.8	0.50	0.24	ug/l	SW846 8260C
Chlorobenzene	0.33 J	1.0	0.19	ug/l	SW846 8260C
Chloroethane	1.7	1.0	0.34	ug/l	SW846 8260C
Cyclohexane	1.6 J	5.0	0.28	ug/l	SW846 8260C
Ethylbenzene	3.3	1.0	0.27	ug/l	SW846 8260C
Isopropylbenzene	1.8	1.0	0.23	ug/l	SW846 8260C
Methylcyclohexane	1.6 J	5.0	0.22	ug/l	SW846 8260C
Toluene	0.44 J	1.0	0.16	ug/l	SW846 8260C
Xylene (total)	73.5	1.0	0.17	ug/l	SW846 8260C
Total TIC, Volatile	30.4 J			ug/l	
Calcium	41400	5000	ug/l	SW846 6010C	
Iron	84400	100	ug/l	SW846 6010C	
Alkalinity, Bicarbonate	159	5.0	mg/l	SM4500CO2 D-11	
Alkalinity, Total as CaCO3	159	13	mg/l	SM2320 B-11	
Chloride	2.0	2.0	mg/l	EPA 300/SW846 9056A	

## Summary of Hits

Page 2 of 3

Job Number: JB93030

Account: Cornerstone Environmental Group, LLC

Project: E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ

Collected: 04/22/15

3

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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Solids, Total Dissolved 103 25 mg/l SM2540 C-11

### JB93030-3F DUP-042215

Calcium	42400	5000	ug/l	SW846 6010C
Iron	87000	100	ug/l	SW846 6010C

### JB93030-4 PMP-POND-042215

No hits reported in this sample.

### JB93030-5 RW-6-042215

Benzene	2.2	0.50	0.24	ug/l	SW846 8260C
Chloroethane	1.7	1.0	0.34	ug/l	SW846 8260C
1,1-Dichloroethane	0.50 J	1.0	0.17	ug/l	SW846 8260C
Calcium	73100	5000	ug/l	SW846 6010C	
Iron	40400	100	ug/l	SW846 6010C	
Magnesium	12400	5000	ug/l	SW846 6010C	
Alkalinity, Bicarbonate	253	5.0	mg/l	SM4500CO2 D-11	
Alkalinity, Total as CaCO3	254	13	mg/l	SM2320 B-11	
Chloride	11.2	2.0	mg/l	EPA 300/SW846 9056A	
Solids, Total Dissolved	285	25	mg/l	SM2540 C-11	

### JB93030-5F RW-6-042215

Calcium	70900	5000	ug/l	SW846 6010C
Iron	33200	100	ug/l	SW846 6010C
Magnesium	12000	5000	ug/l	SW846 6010C

### JB93030-6 SW-PAB-01A-042215

No hits reported in this sample.

### JB93030-7 SR-3-SEEP-1-042215

No hits reported in this sample.

### JB93030-8 SW-PAB-01-042215

No hits reported in this sample.

### JB93030-9 PMP-50-042215

Iron	253	100	ug/l	SW846 6010C
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## Summary of Hits

Page 3 of 3

Job Number: JB93030

Account: Cornerstone Environmental Group, LLC

Project: E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ

Collected: 04/22/15

3

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Alkalinity, Bicarbonate		33.1	5.0		mg/l	SM4500CO2 D-11
Alkalinity, Total as CaCO <sub>3</sub>		33.1	13		mg/l	SM2320 B-11

**JB93030-9F PMP-50-042215**

Iron 496 100 ug/l SW846 6010C

**JB93030-10 SW-PAB-00-042215**

No hits reported in this sample.



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## Sample Results

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## Report of Analysis

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Accutest Laboratories

**Report of Analysis**

Page 1 of 2

<b>Client Sample ID:</b>	TB-042215	<b>Date Sampled:</b>	04/22/15
<b>Lab Sample ID:</b>	JB93030-1	<b>Date Received:</b>	04/22/15
<b>Matrix:</b>	AQ - Trip Blank Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260C		
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1	2B130453.D	1	04/25/15	BK	n/a	n/a	V2B5830
Run #2							

	<b>Purge Volume</b>
Run #1	5.0 ml
Run #2	

**VOA TCL List (OLM4.2)**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
67-64-1	Acetone	ND	10	3.3	ug/l	
71-43-2	Benzene	ND	0.50	0.24	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	1.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.42	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	5.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.25	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.22	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.19	ug/l	
75-00-3	Chloroethane	ND	1.0	0.34	ug/l	
67-66-3	Chloroform	ND	1.0	0.19	ug/l	
74-87-3	Chloromethane	ND	1.0	0.41	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.99	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.15	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.23	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.19	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.23	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.27	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.90	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.17	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.51	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.27	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.65	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.39	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.52	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.7	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.23	ug/l	

ND = Not detected      MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

Page 2 of 2

<b>Client Sample ID:</b>	TB-042215	<b>Date Sampled:</b>	04/22/15
<b>Lab Sample ID:</b>	JB93030-1	<b>Date Received:</b>	04/22/15
<b>Matrix:</b>	AQ - Trip Blank Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260C		
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

**VOA TCL List (OLM4.2)**

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.0	1.9	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.22	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.24	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.73	ug/l	
100-42-5	Styrene	ND	1.0	0.27	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.40	ug/l	
108-88-3	Toluene	ND	1.0	0.16	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.21	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.21	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.43	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.15	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		76-120%
17060-07-0	1,2-Dichloroethane-D4	112%		73-122%
2037-26-5	Toluene-D8	99%		84-119%
460-00-4	4-Bromofluorobenzene	99%		78-117%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
Total TIC, Volatile			0	ug/l	
Total Alkanes			0	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Accutest Laboratories

**Report of Analysis**

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4.2

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<b>Client Sample ID:</b>	SC-1-042215	<b>Date Sampled:</b>	04/22/15
<b>Lab Sample ID:</b>	JB93030-2	<b>Date Received:</b>	04/22/15
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260C		
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1	2B130446.D	1	04/25/15	BK	n/a	n/a	V2B5830
Run #2							

	<b>Purge Volume</b>
Run #1	5.0 ml
Run #2	

**VOA TCL List (OLM4.2)**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
67-64-1	Acetone	ND	10	3.3	ug/l	
71-43-2	Benzene	1.7	0.50	0.24	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	1.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.42	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	5.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.25	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.22	ug/l	
108-90-7	Chlorobenzene	0.30	1.0	0.19	ug/l	J
75-00-3	Chloroethane	1.8	1.0	0.34	ug/l	
67-66-3	Chloroform	ND	1.0	0.19	ug/l	
74-87-3	Chloromethane	ND	1.0	0.41	ug/l	
110-82-7	Cyclohexane	1.7	5.0	0.28	ug/l	J
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.99	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.15	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.23	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.19	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.23	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.27	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.90	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.17	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.51	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.27	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.65	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.39	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
100-41-4	Ethylbenzene	3.3	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.52	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.7	ug/l	
98-82-8	Isopropylbenzene	1.9	1.0	0.23	ug/l	

ND = Not detected      MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

<b>Client Sample ID:</b>	SC-1-042215	<b>Date Sampled:</b>	04/22/15
<b>Lab Sample ID:</b>	JB93030-2	<b>Date Received:</b>	04/22/15
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260C		
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

**VOA TCL List (OLM4.2)**

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.0	1.9	ug/l	
108-87-2	Methylcyclohexane	1.6	5.0	0.22	ug/l	J
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.24	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.73	ug/l	
100-42-5	Styrene	ND	1.0	0.27	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.40	ug/l	
108-88-3	Toluene	0.48	1.0	0.16	ug/l	J
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.21	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.21	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.43	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.15	ug/l	
1330-20-7	Xylene (total)	75.6	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		76-120%
17060-07-0	1,2-Dichloroethane-D4	112%		73-122%
2037-26-5	Toluene-D8	101%		84-119%
460-00-4	4-Bromofluorobenzene	97%		78-117%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
496-11-7	C3 alkyl benzene	16.49	6.5	ug/l	J
	Indane	17.13	5.3	ug/l	JN
	C4 alkyl benzene	17.50	6.3	ug/l	J
	C4 alkyl benzene	17.90	5.3	ug/l	J
	C4 alkyl benzene	17.95	8.5	ug/l	J
	Total TIC, Volatile		31.9	ug/l	J
	Total Alkanes		0	ug/l	

ND = Not detected      MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

**Report of Analysis**

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<b>Client Sample ID:</b>	SC-1-042215	<b>Date Sampled:</b>	04/22/15
<b>Lab Sample ID:</b>	JB93030-2	<b>Date Received:</b>	04/22/15
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

**Total Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium	41000	5000	ug/l	1	04/28/15	04/28/15	ND	SW846 6010C <sup>1</sup>
Iron	84200	100	ug/l	1	04/28/15	04/28/15	ND	SW846 6010C <sup>1</sup>
Magnesium	< 5000	5000	ug/l	1	04/28/15	04/28/15	ND	SW846 6010C <sup>1</sup>
Sodium	< 10000	10000	ug/l	1	04/28/15	04/28/15	ND	SW846 6010C <sup>1</sup>

(1) Instrument QC Batch: MA36535

(2) Prep QC Batch: MP86070

RL = Reporting Limit

**Report of Analysis**

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<b>Client Sample ID:</b>	SC-1-042215	<b>Date Sampled:</b>	04/22/15
<b>Lab Sample ID:</b>	JB93030-2	<b>Date Received:</b>	04/22/15
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

**General Chemistry**

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Bicarbonate	165	5.0	mg/l	1	05/01/15	CB	SM4500CO2 D-11
Alkalinity, Total as CaCO <sub>3</sub>	165	13	mg/l	1	05/01/15	CB	SM2320 B-11
Chloride	2.0	2.0	mg/l	1	05/07/15 22:18	HC	EPA 300/SW846 9056A
Nitrogen, Nitrate <sup>a</sup>	< 0.11	0.11	mg/l	1	05/01/15 15:08	BS	EPA353.2/SM4500NO2B
Nitrogen, Nitrate + Nitrite	< 0.10	0.10	mg/l	1	05/01/15 15:08	BS	EPA 353.2/LACHAT
Nitrogen, Nitrite	< 0.010	0.010	mg/l	1	04/22/15 21:56	JM	SM4500NO2 B-11
Solids, Total Dissolved	160	25	mg/l	1	04/27/15	BM	SM2540 C-11
Sulfate	< 10	10	mg/l	1	05/07/15 22:18	HC	EPA 300/SW846 9056A

(a) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

RL = Reporting Limit

**Report of Analysis**

Page 1 of 1

<b>Client Sample ID:</b>	SC-1-042215	<b>Date Sampled:</b>	04/22/15
<b>Lab Sample ID:</b>	JB93030-2F	<b>Date Received:</b>	04/22/15
<b>Matrix:</b>	AQ - Groundwater Filtered	<b>Percent Solids:</b>	n/a
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

**Dissolved Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium	41600	5000	ug/l	1	04/28/15	04/28/15	ND	SW846 6010C <sup>1</sup>
Iron	85800	100	ug/l	1	04/28/15	04/28/15	ND	SW846 6010C <sup>1</sup>
Magnesium	< 5000	5000	ug/l	1	04/28/15	04/28/15	ND	SW846 6010C <sup>1</sup>
Sodium	< 10000	10000	ug/l	1	04/28/15	04/28/15	ND	SW846 6010C <sup>1</sup>

(1) Instrument QC Batch: MA36535

(2) Prep QC Batch: MP86070

RL = Reporting Limit

Accutest Laboratories

**Report of Analysis**

Page 1 of 2

<b>Client Sample ID:</b>	DUP-042215	<b>Date Sampled:</b>	04/22/15
<b>Lab Sample ID:</b>	JB93030-3	<b>Date Received:</b>	04/22/15
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260C		
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1	2B130447.D	1	04/25/15	BK	n/a	n/a	V2B5830
Run #2							

	<b>Purge Volume</b>
Run #1	5.0 ml
Run #2	

**VOA TCL List (OLM4.2)**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
67-64-1	Acetone	ND	10	3.3	ug/l	
71-43-2	Benzene	1.8	0.50	0.24	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	1.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.42	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	5.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.25	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.22	ug/l	
108-90-7	Chlorobenzene	0.33	1.0	0.19	ug/l	J
75-00-3	Chloroethane	1.7	1.0	0.34	ug/l	
67-66-3	Chloroform	ND	1.0	0.19	ug/l	
74-87-3	Chloromethane	ND	1.0	0.41	ug/l	
110-82-7	Cyclohexane	1.6	5.0	0.28	ug/l	J
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.99	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.15	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.23	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.19	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.23	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.27	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.90	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.17	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.51	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.27	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.65	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.39	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
100-41-4	Ethylbenzene	3.3	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.52	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.7	ug/l	
98-82-8	Isopropylbenzene	1.8	1.0	0.23	ug/l	

ND = Not detected      MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

<b>Client Sample ID:</b>	DUP-042215	<b>Date Sampled:</b>	04/22/15
<b>Lab Sample ID:</b>	JB93030-3	<b>Date Received:</b>	04/22/15
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260C		
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

**VOA TCL List (OLM4.2)**

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.0	1.9	ug/l	
108-87-2	Methylcyclohexane	1.6	5.0	0.22	ug/l	J
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.24	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.73	ug/l	
100-42-5	Styrene	ND	1.0	0.27	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.40	ug/l	
108-88-3	Toluene	0.44	1.0	0.16	ug/l	J
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.21	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.21	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.43	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.15	ug/l	
1330-20-7	Xylene (total)	73.5	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		76-120%
17060-07-0	1,2-Dichloroethane-D4	114%		73-122%
2037-26-5	Toluene-D8	101%		84-119%
460-00-4	4-Bromofluorobenzene	98%		78-117%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
496-11-7	C3 alkyl benzene	16.49	6.1	ug/l	J
	Indane	17.13	5.2	ug/l	JN
	C4 alkyl benzene	17.50	6	ug/l	J
	C4 alkyl benzene	17.90	5	ug/l	J
	C4 alkyl benzene	17.95	8.1	ug/l	J
	Total TIC, Volatile		30.4	ug/l	J
	Total Alkanes		0	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

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<b>Client Sample ID:</b>	DUP-042215	<b>Date Sampled:</b>	04/22/15
<b>Lab Sample ID:</b>	JB93030-3	<b>Date Received:</b>	04/22/15
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

**Total Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium	41400	5000	ug/l	1	04/28/15	04/28/15	ND	SW846 6010C <sup>1</sup>
Iron	84400	100	ug/l	1	04/28/15	04/28/15	ND	SW846 6010C <sup>1</sup>
Magnesium	< 5000	5000	ug/l	1	04/28/15	04/28/15	ND	SW846 6010C <sup>1</sup>
Sodium	< 10000	10000	ug/l	1	04/28/15	04/28/15	ND	SW846 6010C <sup>1</sup>

(1) Instrument QC Batch: MA36535

(2) Prep QC Batch: MP86070

RL = Reporting Limit

**Report of Analysis**

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<b>Client Sample ID:</b>	DUP-042215	<b>Date Sampled:</b>	04/22/15
<b>Lab Sample ID:</b>	JB93030-3	<b>Date Received:</b>	04/22/15
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

**General Chemistry**

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Bicarbonate	159	5.0	mg/l	1	05/01/15	CB	SM4500CO2 D-11
Alkalinity, Total as CaCO <sub>3</sub>	159	13	mg/l	1	05/01/15	CB	SM2320 B-11
Chloride	2.0	2.0	mg/l	1	05/07/15 22:42	HC	EPA 300/SW846 9056A
Nitrogen, Nitrate <sup>a</sup>	< 0.11	0.11	mg/l	1	05/01/15 15:09	BS	EPA353.2/SM4500NO2B
Nitrogen, Nitrate + Nitrite	< 0.10	0.10	mg/l	1	05/01/15 15:09	BS	EPA 353.2/LACHAT
Nitrogen, Nitrite	< 0.010	0.010	mg/l	1	04/22/15 21:56	JM	SM4500NO2 B-11
Solids, Total Dissolved	103	25	mg/l	1	04/27/15	BM	SM2540 C-11
Sulfate	< 10	10	mg/l	1	05/07/15 22:42	HC	EPA 300/SW846 9056A

(a) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

RL = Reporting Limit

**Report of Analysis**

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<b>Client Sample ID:</b>	DUP-042215	<b>Date Sampled:</b>	04/22/15
<b>Lab Sample ID:</b>	JB93030-3F	<b>Date Received:</b>	04/22/15
<b>Matrix:</b>	AQ - Groundwater Filtered	<b>Percent Solids:</b>	n/a
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

**Dissolved Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium	42400	5000	ug/l	1	04/28/15	04/28/15	ND	SW846 6010C <sup>1</sup>
Iron	87000	100	ug/l	1	04/28/15	04/28/15	ND	SW846 6010C <sup>1</sup>
Magnesium	< 5000	5000	ug/l	1	04/28/15	04/28/15	ND	SW846 6010C <sup>1</sup>
Sodium	< 10000	10000	ug/l	1	04/28/15	04/28/15	ND	SW846 6010C <sup>1</sup>
								SW846 3010A <sup>2</sup>

(1) Instrument QC Batch: MA36535

(2) Prep QC Batch: MP86070

RL = Reporting Limit

Accutest Laboratories

**Report of Analysis**

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<b>Client Sample ID:</b>	PMP-POND-042215	<b>Date Sampled:</b>	04/22/15
<b>Lab Sample ID:</b>	JB93030-4	<b>Date Received:</b>	04/22/15
<b>Matrix:</b>	AQ - Surface Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260C		
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1	2B130448.D	1	04/25/15	BK	n/a	n/a	V2B5830
Run #2							

	<b>Purge Volume</b>
Run #1	5.0 ml
Run #2	

**VOA TCL List (OLM4.2)**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
67-64-1	Acetone	ND	10	3.3	ug/l	
71-43-2	Benzene	ND	0.50	0.24	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	1.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.42	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	5.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.25	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.22	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.19	ug/l	
75-00-3	Chloroethane	ND	1.0	0.34	ug/l	
67-66-3	Chloroform	ND	1.0	0.19	ug/l	
74-87-3	Chloromethane	ND	1.0	0.41	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.99	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.15	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.23	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.19	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.23	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.27	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.90	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.17	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.51	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.27	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.65	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.39	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.52	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.7	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.23	ug/l	

ND = Not detected      MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

<b>Client Sample ID:</b>	PMP-POND-042215	<b>Date Sampled:</b>	04/22/15
<b>Lab Sample ID:</b>	JB93030-4	<b>Date Received:</b>	04/22/15
<b>Matrix:</b>	AQ - Surface Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260C		
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

**VOA TCL List (OLM4.2)**

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.0	1.9	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.22	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.24	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.73	ug/l	
100-42-5	Styrene	ND	1.0	0.27	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.40	ug/l	
108-88-3	Toluene	ND	1.0	0.16	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.21	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.21	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.43	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.15	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		76-120%
17060-07-0	1,2-Dichloroethane-D4	113%		73-122%
2037-26-5	Toluene-D8	101%		84-119%
460-00-4	4-Bromofluorobenzene	102%		78-117%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	
	Total Alkanes		0	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Accutest Laboratories

**Report of Analysis**

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<b>Client Sample ID:</b>	RW-6-042215	<b>Date Sampled:</b>	04/22/15
<b>Lab Sample ID:</b>	JB93030-5	<b>Date Received:</b>	04/22/15
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260C		
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1	2B130449.D	1	04/25/15	BK	n/a	n/a	V2B5830
Run #2							

	<b>Purge Volume</b>
Run #1	5.0 ml
Run #2	

**VOA TCL List (OLM4.2)**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
67-64-1	Acetone	ND	10	3.3	ug/l	
71-43-2	Benzene	2.2	0.50	0.24	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	1.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.42	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	5.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.25	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.22	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.19	ug/l	
75-00-3	Chloroethane	1.7	1.0	0.34	ug/l	
67-66-3	Chloroform	ND	1.0	0.19	ug/l	
74-87-3	Chloromethane	ND	1.0	0.41	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.99	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.15	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.23	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.19	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.23	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.27	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.90	ug/l	
75-34-3	1,1-Dichloroethane	0.50	1.0	0.17	ug/l	J
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.51	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.27	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.65	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.39	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.52	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.7	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.23	ug/l	

ND = Not detected      MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

<b>Client Sample ID:</b>	RW-6-042215	<b>Date Sampled:</b>	04/22/15
<b>Lab Sample ID:</b>	JB93030-5	<b>Date Received:</b>	04/22/15
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260C		
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

**VOA TCL List (OLM4.2)**

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.0	1.9	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.22	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.24	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.73	ug/l	
100-42-5	Styrene	ND	1.0	0.27	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.40	ug/l	
108-88-3	Toluene	ND	1.0	0.16	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.21	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.21	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.43	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.15	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		76-120%
17060-07-0	1,2-Dichloroethane-D4	115%		73-122%
2037-26-5	Toluene-D8	101%		84-119%
460-00-4	4-Bromofluorobenzene	98%		78-117%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	
	Total Alkanes		0	ug/l	

ND = Not detected MDL = Method Detection Limit

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RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

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<b>Client Sample ID:</b>	RW-6-042215	<b>Date Sampled:</b>	04/22/15
<b>Lab Sample ID:</b>	JB93030-5	<b>Date Received:</b>	04/22/15
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

**Total Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium	73100	5000	ug/l	1	04/28/15	04/28/15	ND	SW846 6010C <sup>1</sup>
Iron	40400	100	ug/l	1	04/28/15	04/28/15	ND	SW846 6010C <sup>1</sup>
Magnesium	12400	5000	ug/l	1	04/28/15	04/28/15	ND	SW846 6010C <sup>1</sup>
Sodium	< 10000	10000	ug/l	1	04/28/15	04/28/15	ND	SW846 6010C <sup>1</sup>
								SW846 3010A <sup>2</sup>

(1) Instrument QC Batch: MA36535

(2) Prep QC Batch: MP86070

RL = Reporting Limit

**Report of Analysis**

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<b>Client Sample ID:</b>	RW-6-042215	<b>Date Sampled:</b>	04/22/15
<b>Lab Sample ID:</b>	JB93030-5	<b>Date Received:</b>	04/22/15
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

**General Chemistry**

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Bicarbonate	253	5.0	mg/l	1	05/01/15	CB	SM4500CO2 D-11
Alkalinity, Total as CaCO <sub>3</sub>	254	13	mg/l	1	05/01/15	CB	SM2320 B-11
Chloride	11.2	2.0	mg/l	1	05/07/15 23:06	HC	EPA 300/SW846 9056A
Nitrogen, Nitrate <sup>a</sup>	< 0.11	0.11	mg/l	1	05/01/15 15:10	BS	EPA353.2/SM4500NO2B
Nitrogen, Nitrate + Nitrite	< 0.10	0.10	mg/l	1	05/01/15 15:10	BS	EPA 353.2/LACHAT
Nitrogen, Nitrite	< 0.010	0.010	mg/l	1	04/22/15 21:56	JM	SM4500NO2 B-11
Solids, Total Dissolved	285	25	mg/l	1	04/27/15	BM	SM2540 C-11
Sulfate	< 10	10	mg/l	1	05/07/15 23:06	HC	EPA 300/SW846 9056A

(a) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

RL = Reporting Limit

**Report of Analysis**

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<b>Client Sample ID:</b>	RW-6-042215	<b>Date Sampled:</b>	04/22/15
<b>Lab Sample ID:</b>	JB93030-5F	<b>Date Received:</b>	04/22/15
<b>Matrix:</b>	AQ - Groundwater Filtered	<b>Percent Solids:</b>	n/a
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

**Dissolved Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium	70900	5000	ug/l	1	04/28/15	04/28/15	ND	SW846 6010C <sup>1</sup>
Iron	33200	100	ug/l	1	04/28/15	04/28/15	ND	SW846 6010C <sup>1</sup>
Magnesium	12000	5000	ug/l	1	04/28/15	04/28/15	ND	SW846 6010C <sup>1</sup>
Sodium	< 10000	10000	ug/l	1	04/28/15	04/28/15	ND	SW846 6010C <sup>1</sup>
								SW846 3010A <sup>2</sup>

(1) Instrument QC Batch: MA36535

(2) Prep QC Batch: MP86070

RL = Reporting Limit

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<b>Client Sample ID:</b>	SW-PAB-01A-042215	<b>Date Sampled:</b>	04/22/15
<b>Lab Sample ID:</b>	JB93030-6	<b>Date Received:</b>	04/22/15
<b>Matrix:</b>	AQ - Surface Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260C		
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1	2B130454.D	1	04/25/15	BK	n/a	n/a	V2B5830
Run #2							

	<b>Purge Volume</b>
Run #1	5.0 ml
Run #2	

**VOA TCL List (OLM4.2)**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
67-64-1	Acetone	ND	10	3.3	ug/l	
71-43-2	Benzene	ND	0.50	0.24	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	1.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.42	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	5.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.25	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.22	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.19	ug/l	
75-00-3	Chloroethane	ND	1.0	0.34	ug/l	
67-66-3	Chloroform	ND	1.0	0.19	ug/l	
74-87-3	Chloromethane	ND	1.0	0.41	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.99	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.15	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.23	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.19	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.23	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.27	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.90	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.17	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.51	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.27	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.65	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.39	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.52	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.7	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.23	ug/l	

ND = Not detected      MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

<b>Client Sample ID:</b>	SW-PAB-01A-042215	<b>Date Sampled:</b>	04/22/15
<b>Lab Sample ID:</b>	JB93030-6	<b>Date Received:</b>	04/22/15
<b>Matrix:</b>	AQ - Surface Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260C		
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

**VOA TCL List (OLM4.2)**

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.0	1.9	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.22	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.24	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.73	ug/l	
100-42-5	Styrene	ND	1.0	0.27	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.40	ug/l	
108-88-3	Toluene	ND	1.0	0.16	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.21	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.21	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.43	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.15	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		76-120%
17060-07-0	1,2-Dichloroethane-D4	112%		73-122%
2037-26-5	Toluene-D8	99%		84-119%
460-00-4	4-Bromofluorobenzene	99%		78-117%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	
	Total Alkanes		0	ug/l	

ND = Not detected MDL = Method Detection Limit

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RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

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**Report of Analysis**

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<b>Client Sample ID:</b>	SR-3-SEEP-1-042215	<b>Date Sampled:</b>	04/22/15
<b>Lab Sample ID:</b>	JB93030-7	<b>Date Received:</b>	04/22/15
<b>Matrix:</b>	AQ - Surface Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260C		
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1	2B130455.D	1	04/25/15	BK	n/a	n/a	V2B5830
Run #2							

	<b>Purge Volume</b>
Run #1	5.0 ml
Run #2	

**VOA TCL List (OLM4.2)**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
67-64-1	Acetone	ND	10	3.3	ug/l	
71-43-2	Benzene	ND	0.50	0.24	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	1.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.42	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	5.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.25	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.22	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.19	ug/l	
75-00-3	Chloroethane	ND	1.0	0.34	ug/l	
67-66-3	Chloroform	ND	1.0	0.19	ug/l	
74-87-3	Chloromethane	ND	1.0	0.41	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.99	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.15	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.23	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.19	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.23	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.27	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.90	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.17	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.51	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.27	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.65	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.39	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.52	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.7	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.23	ug/l	

ND = Not detected      MDL = Method Detection Limit

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**Report of Analysis**

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<b>Client Sample ID:</b>	SR-3-SEEP-1-042215	<b>Date Sampled:</b>	04/22/15
<b>Lab Sample ID:</b>	JB93030-7	<b>Date Received:</b>	04/22/15
<b>Matrix:</b>	AQ - Surface Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260C		
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

**VOA TCL List (OLM4.2)**

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.0	1.9	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.22	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.24	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.73	ug/l	
100-42-5	Styrene	ND	1.0	0.27	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.40	ug/l	
108-88-3	Toluene	ND	1.0	0.16	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.21	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.21	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.43	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.15	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		76-120%
17060-07-0	1,2-Dichloroethane-D4	113%		73-122%
2037-26-5	Toluene-D8	101%		84-119%
460-00-4	4-Bromofluorobenzene	100%		78-117%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	
	Total Alkanes		0	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

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**Report of Analysis**

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<b>Client Sample ID:</b>	SW-PAB-01-042215	<b>Date Sampled:</b>	04/22/15
<b>Lab Sample ID:</b>	JB93030-8	<b>Date Received:</b>	04/22/15
<b>Matrix:</b>	AQ - Surface Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260C		
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1	2B130456.D	1	04/25/15	BK	n/a	n/a	V2B5830
Run #2							

	<b>Purge Volume</b>
Run #1	5.0 ml
Run #2	

**VOA TCL List (OLM4.2)**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
67-64-1	Acetone	ND	10	3.3	ug/l	
71-43-2	Benzene	ND	0.50	0.24	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	1.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.42	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	5.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.25	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.22	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.19	ug/l	
75-00-3	Chloroethane	ND	1.0	0.34	ug/l	
67-66-3	Chloroform	ND	1.0	0.19	ug/l	
74-87-3	Chloromethane	ND	1.0	0.41	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.99	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.15	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.23	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.19	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.23	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.27	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.90	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.17	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.51	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.27	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.65	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.39	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.52	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.7	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.23	ug/l	

ND = Not detected      MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

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**Report of Analysis**

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<b>Client Sample ID:</b>	SW-PAB-01-042215	<b>Date Sampled:</b>	04/22/15
<b>Lab Sample ID:</b>	JB93030-8	<b>Date Received:</b>	04/22/15
<b>Matrix:</b>	AQ - Surface Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260C		
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

**VOA TCL List (OLM4.2)**

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.0	1.9	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.22	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.24	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.73	ug/l	
100-42-5	Styrene	ND	1.0	0.27	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.40	ug/l	
108-88-3	Toluene	ND	1.0	0.16	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.21	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.21	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.43	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.15	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		76-120%
17060-07-0	1,2-Dichloroethane-D4	113%		73-122%
2037-26-5	Toluene-D8	100%		84-119%
460-00-4	4-Bromofluorobenzene	100%		78-117%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
Total TIC, Volatile			0	ug/l	
Total Alkanes			0	ug/l	

ND = Not detected MDL = Method Detection Limit

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E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

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**Report of Analysis**

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<b>Client Sample ID:</b>	PMP-50-042215	<b>Date Sampled:</b>	04/22/15
<b>Lab Sample ID:</b>	JB93030-9	<b>Date Received:</b>	04/22/15
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260C		
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1	2B130457.D	1	04/25/15	BK	n/a	n/a	V2B5830
Run #2							

	<b>Purge Volume</b>
Run #1	5.0 ml
Run #2	

**VOA TCL List (OLM4.2)**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
67-64-1	Acetone	ND	10	3.3	ug/l	
71-43-2	Benzene	ND	0.50	0.24	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	1.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.42	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	5.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.25	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.22	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.19	ug/l	
75-00-3	Chloroethane	ND	1.0	0.34	ug/l	
67-66-3	Chloroform	ND	1.0	0.19	ug/l	
74-87-3	Chloromethane	ND	1.0	0.41	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.99	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.15	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.23	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.19	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.23	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.27	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.90	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.17	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.51	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.27	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.65	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.39	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.52	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.7	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.23	ug/l	

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E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

<b>Client Sample ID:</b>	PMP-50-042215	<b>Date Sampled:</b>	04/22/15
<b>Lab Sample ID:</b>	JB93030-9	<b>Date Received:</b>	04/22/15
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260C		
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

**VOA TCL List (OLM4.2)**

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.0	1.9	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.22	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.24	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.73	ug/l	
100-42-5	Styrene	ND	1.0	0.27	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.40	ug/l	
108-88-3	Toluene	ND	1.0	0.16	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.21	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.21	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.43	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.15	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		76-120%
17060-07-0	1,2-Dichloroethane-D4	112%		73-122%
2037-26-5	Toluene-D8	100%		84-119%
460-00-4	4-Bromofluorobenzene	101%		78-117%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
Total TIC, Volatile			0	ug/l	
Total Alkanes			0	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

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**Report of Analysis**

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<b>Client Sample ID:</b>	PMP-50-042215	<b>Date Sampled:</b>	04/22/15
<b>Lab Sample ID:</b>	JB93030-9	<b>Date Received:</b>	04/22/15
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

**Total Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium	< 5000	5000	ug/l	1	04/28/15	04/28/15	ND	SW846 6010C <sup>1</sup>
Iron	253	100	ug/l	1	04/28/15	04/28/15	ND	SW846 6010C <sup>1</sup>
Magnesium	< 5000	5000	ug/l	1	04/28/15	04/28/15	ND	SW846 6010C <sup>1</sup>
Sodium	< 10000	10000	ug/l	1	04/28/15	04/28/15	ND	SW846 6010C <sup>1</sup>

(1) Instrument QC Batch: MA36535

(2) Prep QC Batch: MP86070

RL = Reporting Limit

**Report of Analysis**

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<b>Client Sample ID:</b>	PMP-50-042215	<b>Date Sampled:</b>	04/22/15
<b>Lab Sample ID:</b>	JB93030-9	<b>Date Received:</b>	04/22/15
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

**General Chemistry**

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Bicarbonate	33.1	5.0	mg/l	1	05/01/15	CB	SM4500CO2 D-11
Alkalinity, Total as CaCO <sub>3</sub>	33.1	13	mg/l	1	05/01/15	CB	SM2320 B-11
Chloride	< 2.0	2.0	mg/l	1	05/08/15 00:41	HC	EPA 300/SW846 9056A
Nitrogen, Nitrate <sup>a</sup>	< 0.11	0.11	mg/l	1	05/01/15 15:11	BS	EPA353.2/SM4500NO2B
Nitrogen, Nitrate + Nitrite	< 0.10	0.10	mg/l	1	05/01/15 15:11	BS	EPA 353.2/LACHAT
Nitrogen, Nitrite	< 0.010	0.010	mg/l	1	04/22/15 21:56	JM	SM4500NO2 B-11
Solids, Total Dissolved	< 10	10	mg/l	1	04/27/15	BM	SM2540 C-11
Sulfate	< 10	10	mg/l	1	05/08/15 00:41	HC	EPA 300/SW846 9056A

(a) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

RL = Reporting Limit

**Report of Analysis**

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<b>Client Sample ID:</b>	PMP-50-042215	<b>Date Sampled:</b>	04/22/15
<b>Lab Sample ID:</b>	JB93030-9F	<b>Date Received:</b>	04/22/15
<b>Matrix:</b>	AQ - Groundwater Filtered	<b>Percent Solids:</b>	n/a
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

**Dissolved Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium	< 5000	5000	ug/l	1	04/28/15	04/28/15	ND	SW846 6010C <sup>1</sup>
Iron	496	100	ug/l	1	04/28/15	04/28/15	ND	SW846 6010C <sup>1</sup>
Magnesium	< 5000	5000	ug/l	1	04/28/15	04/28/15	ND	SW846 6010C <sup>1</sup>
Sodium	< 10000	10000	ug/l	1	04/28/15	04/28/15	ND	SW846 6010C <sup>1</sup>

(1) Instrument QC Batch: MA36535

(2) Prep QC Batch: MP86070

RL = Reporting Limit

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**Report of Analysis**

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<b>Client Sample ID:</b>	SW-PAB-00-042215	<b>Date Sampled:</b>	04/22/15
<b>Lab Sample ID:</b>	JB93030-10	<b>Date Received:</b>	04/22/15
<b>Matrix:</b>	AQ - Surface Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260C		
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1	2B130458.D	1	04/25/15	BK	n/a	n/a	V2B5830
Run #2							

	<b>Purge Volume</b>
Run #1	5.0 ml
Run #2	

**VOA TCL List (OLM4.2)**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
67-64-1	Acetone	ND	10	3.3	ug/l	
71-43-2	Benzene	ND	0.50	0.24	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	1.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.42	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	5.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.25	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.22	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.19	ug/l	
75-00-3	Chloroethane	ND	1.0	0.34	ug/l	
67-66-3	Chloroform	ND	1.0	0.19	ug/l	
74-87-3	Chloromethane	ND	1.0	0.41	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.99	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.15	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.23	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.19	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.23	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.27	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.90	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.17	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.51	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.27	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.65	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.39	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.52	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.7	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.23	ug/l	

ND = Not detected      MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

4.14  
4

**Report of Analysis**

<b>Client Sample ID:</b>	SW-PAB-00-042215	<b>Date Sampled:</b>	04/22/15
<b>Lab Sample ID:</b>	JB93030-10	<b>Date Received:</b>	04/22/15
<b>Matrix:</b>	AQ - Surface Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260C		
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

**VOA TCL List (OLM4.2)**

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.0	1.9	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.22	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.24	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.73	ug/l	
100-42-5	Styrene	ND	1.0	0.27	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.40	ug/l	
108-88-3	Toluene	ND	1.0	0.16	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.21	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.21	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.43	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.15	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		76-120%
17060-07-0	1,2-Dichloroethane-D4	115%		73-122%
2037-26-5	Toluene-D8	101%		84-119%
460-00-4	4-Bromofluorobenzene	99%		78-117%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	
	Total Alkanes		0	ug/l	

ND = Not detected      MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound



## Misc. Forms

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5

### Custody Documents and Other Forms

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Includes the following where applicable:

- Chain of Custody
- Sample Tracking Chronicle
- Internal Chain of Custody

CW  
SW  
W1B

# CHAIN OF CUSTODY

2235 Route 130, Dayton, NJ 08810  
TEL: 732-329-0200 FAX: 732-329-3499/3480  
www.accutest.com

PAGE    OF   

FED-EX Tracking #	Bottle Order Control #
Accutest Quote #	Accutest Job #

**JB93030**

Client / Reporting Information		Project Information			Requested Analysis ( see TEST CODE sheet)										Matrix Codes							
Company Name <i>Cornerstone Environmental Group</i>	Project Name: <i>E 203361 (Ford Ringwood)</i>																					
Street Address <i>100 Crystal Run Rd, Su, Toko1 Peters Mine Road</i>	Street <i>Peters Mine Road</i>																					
City <i>Middletown NY 10541</i>	State <i>NY</i>	City <i>Ringwood NJ</i>	State <i>NJ</i>	Billing Information ( If different from Report to )																		
Project Contact <i>Tim Reeper</i>	E-mail <i>tim.reeper@cornerstonegroup.com</i>	Project # <i>#</i>	Client Purchase Order # <i></i>	Street Address																		
Phone # <i>845-695-0252</i>	Fax # <i></i>				City <i></i>			State <i></i>		Zip <i></i>												
Sampler(s) Name(s) <i>Rob Lautenberg and Dan Wheeler</i>	Phone <i></i>	Project Manager <i>Tim Reeper</i>	Attention: <i></i>																			
Account # <i></i>		Field ID / Point of Collection <i></i>		Collection			Number of preserved Bottles										LAB USE ONLY <i>A14</i>					
				Date <i>4/22/15</i>	Time <i>-</i>	Sampled by <i></i>	Matrix <i></i>	# of bottles <i>2 2</i>	HCl <input checked="" type="checkbox"/>	NaOH <input type="checkbox"/>	H2SO4 <input type="checkbox"/>	None <input type="checkbox"/>	DI Water <input type="checkbox"/>	MEOH <input type="checkbox"/>	ENCORE <input type="checkbox"/>	TDS <input checked="" type="checkbox"/>		SO4 <input checked="" type="checkbox"/>	Chloride <input checked="" type="checkbox"/>	HCO3 <input checked="" type="checkbox"/>	Nitrate <input checked="" type="checkbox"/>	Al, Na, Ca, Fe <i>Dissolved Mg, Na, Ca, Fe</i>
1	TB-042215	4/22/15	-	-	TB	2 2																
2F	SL-1-042215	4/22/15	10:10	DW	GW	8 3	2 1 2															
3F	DUP-042215	4/22/15	12:00	DW	GW	8 3	2 1 2															
4	PMP-Pond-042215	4/22/15	10:30	RL	SW	3 3	X															
5F	RL-6-042215	4/22/15	12:50	DW	GW	8 3	2 1 2															
6	SW-PAB-O1A-042215	4/22/15	15:00	RL	SW	3 3																
7	SR-3-SEEP-1-042215	4/22/15	15:25	RL	SW	3 3																
8	SW-PAB-O1-042215	4/22/15	15:40	RL	SW	3 3																
9F	PMP-SO-042215	4/22/15	15:40	DW	GW	8 3	2 1 2															
10	SW-PAB-OO-042215	4/22/15	16:30	RL	SW	3 3																
Turnaround Time ( Business days )				Data Deliverable Information										Comments / Special Instructions								
<input type="checkbox"/> Std. 10 Business Days <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 3 Day RUSH <input type="checkbox"/> 2 Day RUSH <input type="checkbox"/> 1 Day RUSH <input type="checkbox"/> other _____				Approved By (Accutest PM): / Date: _____ _____ _____ _____ _____ _____										Commercial "A" (Level 1) <input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> NYASP Category A <input type="checkbox"/> FULLT1 (Level 3+4) <input type="checkbox"/> NYASP Category B <input type="checkbox"/> NJ Reduced <input type="checkbox"/> State Forms <input type="checkbox"/> Commercial "C" <input type="checkbox"/> EDD Format <input type="checkbox"/> NJ Data of Known Quality Protocol Reporting <input type="checkbox"/> Other <input type="checkbox"/>  Commercial "A" = Results Only, Commercial "B" = Results + QC Summary NJ Reduced = Results + QC Summary + Partial Raw data								
Emergency & Rush T/A data available VIA Lablink														INITIAL ASSESSMENT <u>4A/AL</u> LABEL VERIFICATION _____								
<u>Relinquished by Sampler:</u> <u>Reinforced by Sampler:</u> <u>3</u> <u>5</u>				Date Time: <i>4/22/15 18:15</i>		Received By: <i>1</i>		Relinquished By: <i>2</i>		Date Time: <i>4/22/15 20:00</i>		Received By: <i>4</i>		Custody Seal # <i>5</i>		Intact <input type="checkbox"/>		Preserved where applicable <input checked="" type="checkbox"/>		On Ice <input type="checkbox"/>	Cooler Temp. <i>46.6</i>	
<u>Relinquished by Sampler:</u> <u>3</u> <u>5</u>				Date Time: <i></i>		Received By: <i></i>		Relinquished By: <i></i>		Date Time: <i></i>		Received By: <i></i>		Custody Seal # <i></i>		<input type="checkbox"/>		<input type="checkbox"/>				

**JB93030: Chain of Custody**

**Page 1 of 2**



## Accutest Laboratories Sample Receipt Summary

Accutest Job Number: JB93030

Client: \_\_\_\_\_

Project: \_\_\_\_\_

Date / Time Received: 4/22/2015 8:08:00 PM

Delivery Method: \_\_\_\_\_

Airbill #'s: \_\_\_\_\_

Cooler Temps (Initial/Adjusted): #1: (4.6/2.8); 0

**Cooler Security**      Y or N

- |                           |                                     |                          |                       |                                     |                          |
|---------------------------|-------------------------------------|--------------------------|-----------------------|-------------------------------------|--------------------------|
| 1. Custody Seals Present: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 3. COC Present:       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Custody Seals Intact:  | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 4. Smpl Dates/Time OK | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

**Cooler Temperature**      Y or N

- |                              |                                     |                          |
|------------------------------|-------------------------------------|--------------------------|
| 1. Temp criteria achieved:   | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Cooler temp verification: | IR Gun                              |                          |
| 3. Cooler media:             | Ice (Bag)                           |                          |
| 4. No. Coolers:              | 1                                   |                          |

**Quality Control Preservation**      Y or N      N/A

- |                                 |                                     |                          |                          |
|---------------------------------|-------------------------------------|--------------------------|--------------------------|
| 1. Trip Blank present / cooler: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Trip Blank listed on COC:    | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Samples preserved properly:  | <input checked="" type="checkbox"/> | <input type="checkbox"/> |                          |
| 4. VOCs headspace free:         | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

**Sample Integrity - Documentation**

- |  |                                     |                          |
|--|-------------------------------------|--------------------------|
| 1. Sample labels present on bottles:   | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Container labeling complete:        | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Sample container label / COC agree: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

**Sample Integrity - Condition**

- |                                  |                                     |                          |
|----------------------------------|-------------------------------------|--------------------------|
| 1. Sample recvd within HT:       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. All containers accounted for: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Condition of sample:          | Intact                              |                          |

**Sample Integrity - Instructions**

- |   |                                     |                                     |
|---|-------------------------------------|-------------------------------------|
| 1. Analysis requested is clear:           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 2. Bottles received for unspecified tests | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 3. Sufficient volume recvd for analysis:  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 4. Compositing instructions clear:        | <input type="checkbox"/>            | <input type="checkbox"/>            |
| 5. Filtering instructions clear:          | <input type="checkbox"/>            | <input type="checkbox"/>            |

Comments

Accutest Laboratories  
V:732.329.02002235 US Highway 130  
F: 732.329.3499Dayton, New Jersey  
www.accutest.com

**JB93030: Chain of Custody**  
**Page 2 of 2**

Accutest Laboratories

## Internal Sample Tracking Chronicle

Cornerstone Environmental Group, LLC

**Job No:** JB93030

E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JB93030-1	Collected: 22-APR-15 16:30 By: DW TB-042215			Received: 22-APR-15 By: AS		
JB93030-1	SW846 8260C	25-APR-15 16:02	BK			V8260TCL42+
JB93030-2	Collected: 22-APR-15 10:10 By: DW SC-1-042215			Received: 22-APR-15 By: AS		
JB93030-2	SM4500NO2 B-11	22-APR-15 21:56	JM			NO2
JB93030-2	SW846 8260C	25-APR-15 12:40	BK			V8260TCL42+
JB93030-2	SM2540 C-11	27-APR-15	BM			TDS
JB93030-2	SW846 6010C	28-APR-15 19:13	ND	28-APR-15 MO		CA,FE,MG,NA
JB93030-2	SM2320 B-11	01-MAY-15	CB			ALK
JB93030-2	SM4500CO2 D-11	01-MAY-15	CB			BIC
JB93030-2	EPA353.2/SM4500NO2B1-MAY-15 15:08	BS				NO3O
JB93030-2	EPA 353.2/LACHAT	01-MAY-15 15:08	BS	01-MAY-15 BS		NO32
JB93030-2	EPA 300/SW846 9056A07-MAY-15 22:18	HC	07-MAY-15 HC			CHL,SO4
JB93030-3	Collected: 22-APR-15 12:00 By: DW DUP-042215			Received: 22-APR-15 By: AS		
JB93030-3	SM4500NO2 B-11	22-APR-15 21:56	JM			NO2
JB93030-3	SW846 8260C	25-APR-15 13:09	BK			V8260TCL42+
JB93030-3	SM2540 C-11	27-APR-15	BM			TDS
JB93030-3	SW846 6010C	28-APR-15 19:31	ND	28-APR-15 MO		CA,FE,MG,NA
JB93030-3	SM2320 B-11	01-MAY-15	CB			ALK
JB93030-3	SM4500CO2 D-11	01-MAY-15	CB			BIC
JB93030-3	EPA353.2/SM4500NO2B1-MAY-15 15:09	BS				NO3O
JB93030-3	EPA 353.2/LACHAT	01-MAY-15 15:09	BS	01-MAY-15 BS		NO32
JB93030-3	EPA 300/SW846 9056A07-MAY-15 22:42	HC	07-MAY-15 HC			CHL,SO4
JB93030-4	Collected: 22-APR-15 10:30 By: RL PMP-POND-042215			Received: 22-APR-15 By: AS		
JB93030-4	SW846 8260C	25-APR-15 13:37	BK			V8260TCL42+
JB93030-5	Collected: 22-APR-15 12:50 By: DW RW-6-042215			Received: 22-APR-15 By: AS		
JB93030-5	SM4500NO2 B-11	22-APR-15 21:56	JM			NO2

## Internal Sample Tracking Chronicle

Cornerstone Environmental Group, LLC

**Job No:** JB93030

E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JB93030-5	SW846 8260C	25-APR-15 14:06	BK			V8260TCL42+
JB93030-5	SM2540 C-11	27-APR-15	BM			TDS
JB93030-5	SW846 6010C	28-APR-15 19:37	ND	28-APR-15	MO	CA,FE,MG,NA
JB93030-5	SM2320 B-11	01-MAY-15	CB			ALK
JB93030-5	SM4500CO2 D-11	01-MAY-15	CB			BIC
JB93030-5	EPA353.2/SM4500NO2	01-MAY-15 15:10	BS			NO30
JB93030-5	EPA 353.2/LACHAT	01-MAY-15 15:10	BS	01-MAY-15	BS	NO32
JB93030-5	EPA 300/SW846 9056A07	MAY-15 23:06	HC	07-MAY-15	HC	CHL,SO4
JB93030-6	Collected: 22-APR-15 15:00	By: RL		Received: 22-APR-15	By: AS	
	SW-PAB-01A-042215					
JB93030-6	SW846 8260C	25-APR-15 16:31	BK			V8260TCL42+
JB93030-7	Collected: 22-APR-15 15:25	By: RL		Received: 22-APR-15	By: AS	
	SR-3-SEEP-1-042215					
JB93030-7	SW846 8260C	25-APR-15 17:01	BK			V8260TCL42+
JB93030-8	Collected: 22-APR-15 15:40	By: RL		Received: 22-APR-15	By: AS	
	SW-PAB-01-042215					
JB93030-8	SW846 8260C	25-APR-15 17:30	BK			V8260TCL42+
JB93030-9	Collected: 22-APR-15 15:40	By: DW		Received: 22-APR-15	By: AS	
	PMP-50-042215					
JB93030-9	SM4500NO2 B-11	22-APR-15 21:56	JM			NO2
JB93030-9	SW846 8260C	25-APR-15 17:59	BK			V8260TCL42+
JB93030-9	SM2540 C-11	27-APR-15	BM			TDS
JB93030-9	SW846 6010C	28-APR-15 19:43	ND	28-APR-15	MO	CA,FE,MG,NA
JB93030-9	SM2320 B-11	01-MAY-15	CB			ALK
JB93030-9	SM4500CO2 D-11	01-MAY-15	CB			BIC
JB93030-9	EPA353.2/SM4500NO2	01-MAY-15 15:11	BS			NO30
JB93030-9	EPA 353.2/LACHAT	01-MAY-15 15:11	BS	01-MAY-15	BS	NO32
JB93030-9	EPA 300/SW846 9056A08	MAY-15 00:41	HC	07-MAY-15	HC	CHL,SO4
JB93030-10	Collected: 22-APR-15 16:30	By: RL		Received: 22-APR-15	By: AS	
	SW-PAB-00-042215					

Accutest Laboratories

## Internal Sample Tracking Chronicle

Cornerstone Environmental Group, LLC

**Job No:** JB93030

E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JB93030-10	SW846 8260C	25-APR-15 18:28	BK			V8260TCL42+
JB93030-2F	Collected: 22-APR-15 10:10 By: DW SC-1-042215			Received: 22-APR-15	By: AS	
JB93030-2F	SW846 6010C	28-APR-15 19:49	ND	28-APR-15	MO	CA,FE,MG,NA
JB93030-3F	Collected: 22-APR-15 12:00 By: DW DUP-042215			Received: 22-APR-15	By: AS	
JB93030-3F	SW846 6010C	28-APR-15 19:55	ND	28-APR-15	MO	CA,FE,MG,NA
JB93030-5F	Collected: 22-APR-15 12:50 By: DW RW-6-042215			Received: 22-APR-15	By: AS	
JB93030-5F	SW846 6010C	28-APR-15 20:01	ND	28-APR-15	MO	CA,FE,MG,NA
JB93030-9F	Collected: 22-APR-15 15:40 By: DW PMP-50-042215			Received: 22-APR-15	By: AS	
JB93030-9F	SW846 6010C	28-APR-15 20:07	ND	28-APR-15	MO	CA,FE,MG,NA

# Accutest Internal Chain of Custody

Page 1 of 8

**Job Number:** JB93030

**Account:** CORNNYM Cornerstone Environmental Group, LLC

**Project:** E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ

**Received:** 04/22/15

5.3  
5

Sample/Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JB93030-1.1	Secured Storage	Bridget Kelly	04/24/15 15:45	Retrieve from Storage
JB93030-1.1	Bridget Kelly	GCMS2B	04/24/15 15:45	Load on Instrument
JB93030-1.1	GCMS2B	Bridget Kelly	04/27/15 09:42	Unload from Instrument
JB93030-1.1	Bridget Kelly	Secured Storage	04/27/15 09:42	Return to Storage
JB93030-2.1	Secured Storage	Alfredo Crespo	04/28/15 07:18	Retrieve from Storage
JB93030-2.1	Alfredo Crespo	Secured Staging Area	04/28/15 07:18	Return to Storage
JB93030-2.1	Secured Staging Area	Francis Pandolfo	04/28/15 08:07	Retrieve from Storage
JB93030-2.1	Francis Pandolfo	Secured Storage	04/28/15 08:58	Return to Storage
JB93030-2.1	Secured Storage	Francis Pandolfo	04/28/15 09:02	Retrieve from Storage
JB93030-2.1	Francis Pandolfo	Secured Storage	04/28/15 10:46	Return to Storage
JB93030-2.1.1	Francis Pandolfo	Metals Digestion	04/28/15 10:45	Digestate from JB93030-2.1
JB93030-2.1.1	Metals Digestion	Francis Pandolfo	04/28/15 10:45	Digestate from JB93030-2.1
JB93030-2.1.1	Francis Pandolfo	Metals Digestate Storage	04/28/15 10:45	Return to Storage
JB93030-2.3	Secured Storage	Gage Donahue	04/25/15 16:49	Retrieve from Storage
JB93030-2.3	Gage Donahue	Secured Staging Area	04/25/15 16:49	Return to Storage
JB93030-2.3	Secured Staging Area	Krimesh Patel	04/26/15 12:13	Retrieve from Storage
JB93030-2.3	Krimesh Patel	Secured Storage	04/26/15 15:31	Return to Storage
JB93030-2.3	Secured Storage	Bernadette Vassilatos	04/27/15 07:47	Retrieve from Storage
JB93030-2.3	Bernadette Vassilatos	Secured Staging Area	04/27/15 07:47	Return to Storage
JB93030-2.3	Secured Staging Area	Beatrice Marcelino	04/27/15 09:00	Retrieve from Storage
JB93030-2.3	Beatrice Marcelino	Secured Storage	04/27/15 16:21	Return to Storage
JB93030-2.3	Secured Storage	Gage Donahue	04/30/15 09:40	Retrieve from Storage
JB93030-2.3	Gage Donahue	Secured Staging Area	04/30/15 09:40	Return to Storage
JB93030-2.3	Secured Staging Area	Jayshree Amin	04/30/15 09:44	Retrieve from Storage
JB93030-2.3	Jayshree Amin	Secured Storage	04/30/15 16:49	Return to Storage
JB93030-2.3	Secured Storage	Todd Shoemaker	05/05/15 09:32	Retrieve from Storage
JB93030-2.3	Todd Shoemaker	Hannah Coffin	05/05/15 09:33	Custody Transfer
JB93030-2.3	Hannah Coffin	Secured Storage	05/05/15 16:03	Return to Storage
JB93030-2.3	Secured Storage	Bernadette Vassilatos	05/06/15 08:10	Retrieve from Storage
JB93030-2.3	Bernadette Vassilatos	Secured Staging Area	05/06/15 08:10	Return to Storage
JB93030-2.3	Secured Staging Area	Hannah Coffin	05/06/15 08:40	Retrieve from Storage
JB93030-2.3	Hannah Coffin	Secured Storage	05/06/15 15:44	Return to Storage
JB93030-2.3	Secured Storage	Gage Donahue	05/07/15 06:46	Retrieve from Storage
JB93030-2.3	Gage Donahue	Secured Staging Area	05/07/15 06:46	Return to Storage
JB93030-2.3	Secured Staging Area	Hannah Coffin	05/07/15 08:35	Retrieve from Storage
JB93030-2.3	Hannah Coffin	Secured Storage	05/07/15 15:30	Return to Storage
JB93030-2.4	Secured Storage	Todd Shoemaker	05/01/15 11:49	Retrieve from Storage
JB93030-2.4	Todd Shoemaker	Brian Schneller	05/01/15 11:50	Custody Transfer
JB93030-2.4	Brian Schneller	Secured Storage	05/01/15 20:26	Return to Storage

## Accutest Internal Chain of Custody

Page 2 of 8

Job Number: JB93030

Account: CORNNYM Cornerstone Environmental Group, LLC

Project: E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ

Received: 04/22/15

Sample/Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JB93030-2.5	Secured Storage	Dawan Currie	04/22/15 21:41	Retrieve from Storage
JB93030-2.5	Dawan Currie	Secured Staging Area	04/22/15 21:41	Return to Storage
JB93030-2.5	Secured Staging Area	Jeremy Miles	04/22/15 21:45	Retrieve from Storage
JB93030-2.5	Jeremy Miles	Secured Storage	04/22/15 23:23	Return to Storage
JB93030-2.5	Secured Storage	Luis Villanueva	04/25/15 08:53	Retrieve from Storage
JB93030-2.5	Luis Villanueva	Secured Staging Area	04/25/15 08:53	Return to Storage
JB93030-2.5	Secured Staging Area	Krimesh Patel	04/25/15 16:20	Retrieve from Storage
JB93030-2.5	Krimesh Patel	Secured Storage	04/25/15 16:54	Return to Storage
JB93030-2.5	Secured Storage	Dwayne Johnson	05/01/15 09:41	Retrieve from Storage
JB93030-2.5	Dwayne Johnson	Secured Staging Area	05/01/15 09:42	Return to Storage
JB93030-2.5	Secured Staging Area	Chris Brunson	05/01/15 15:31	Retrieve from Storage
JB93030-2.5	Chris Brunson	Secured Storage	05/01/15 17:32	Return to Storage
JB93030-2.6	Secured Storage	Bridget Kelly	04/24/15 15:45	Retrieve from Storage
JB93030-2.6	Bridget Kelly	GCMS2B	04/24/15 15:45	Load on Instrument
JB93030-2.6	GCMS2B	Bridget Kelly	04/27/15 09:42	Unload from Instrument
JB93030-2.6	Bridget Kelly	Secured Storage	04/27/15 09:42	Return to Storage
JB93030-2.7	Secured Storage	Bridget Kelly	04/24/15 15:45	Retrieve from Storage
JB93030-2.7	Bridget Kelly	GCMS2B	04/24/15 15:45	Load on Instrument
JB93030-2.7	GCMS2B	Bridget Kelly	04/27/15 09:42	Unload from Instrument
JB93030-2.7	Bridget Kelly	Secured Storage	04/27/15 09:42	Return to Storage
JB93030-2F.2	Secured Storage	Alfredo Crespo	04/28/15 07:18	Retrieve from Storage
JB93030-2F.2	Alfredo Crespo	Secured Staging Area	04/28/15 07:18	Return to Storage
JB93030-2F.2	Secured Staging Area	Francis Pandolfo	04/28/15 08:07	Retrieve from Storage
JB93030-2F.2	Francis Pandolfo	Secured Storage	04/28/15 08:58	Return to Storage
JB93030-2F.2	Secured Storage	Francis Pandolfo	04/28/15 09:02	Retrieve from Storage
JB93030-2F.2	Francis Pandolfo	Secured Storage	04/28/15 10:46	Return to Storage
JB93030-2F.2.1	Francis Pandolfo	Metals Digestion	04/28/15 10:45	Digestate from JB93030-2F.2
JB93030-2F.2.1	Metals Digestion	Francis Pandolfo	04/28/15 10:45	Digestate from JB93030-2F.2
JB93030-2F.2.1	Francis Pandolfo	Metals Digestate Storage	04/28/15 10:45	Return to Storage
JB93030-3.1	Secured Storage	Alfredo Crespo	04/28/15 07:18	Retrieve from Storage
JB93030-3.1	Alfredo Crespo	Secured Staging Area	04/28/15 07:18	Return to Storage
JB93030-3.1	Secured Staging Area	Francis Pandolfo	04/28/15 08:07	Retrieve from Storage
JB93030-3.1	Francis Pandolfo	Secured Storage	04/28/15 08:58	Return to Storage
JB93030-3.1	Secured Storage	Francis Pandolfo	04/28/15 09:02	Retrieve from Storage
JB93030-3.1	Francis Pandolfo	Secured Storage	04/28/15 10:46	Return to Storage
JB93030-3.1.1	Francis Pandolfo	Metals Digestion	04/28/15 10:45	Digestate from JB93030-3.1
JB93030-3.1.1	Metals Digestion	Francis Pandolfo	04/28/15 10:45	Digestate from JB93030-3.1
JB93030-3.1.1	Francis Pandolfo	Metals Digestate Storage	04/28/15 10:45	Return to Storage

# Accutest Internal Chain of Custody

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**Job Number:** JB93030  
**Account:** CORNNYM Cornerstone Environmental Group, LLC  
**Project:** E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ  
**Received:** 04/22/15

Sample/Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JB93030-3.3	Secured Storage	Gage Donahue	04/25/15 16:49	Retrieve from Storage
JB93030-3.3	Gage Donahue	Secured Staging Area	04/25/15 16:49	Return to Storage
JB93030-3.3	Secured Staging Area	Krimesh Patel	04/26/15 12:13	Retrieve from Storage
JB93030-3.3	Krimesh Patel	Secured Storage	04/26/15 15:31	Return to Storage
JB93030-3.3	Secured Storage	Bernadette Vassilatos	04/27/15 07:47	Retrieve from Storage
JB93030-3.3	Bernadette Vassilatos	Secured Staging Area	04/27/15 07:47	Return to Storage
JB93030-3.3	Secured Staging Area	Beatrice Marcelino	04/27/15 09:00	Retrieve from Storage
JB93030-3.3	Beatrice Marcelino	Secured Storage	04/27/15 16:21	Return to Storage
JB93030-3.3	Secured Storage	Gage Donahue	04/30/15 09:40	Retrieve from Storage
JB93030-3.3	Gage Donahue	Secured Staging Area	04/30/15 09:40	Return to Storage
JB93030-3.3	Secured Staging Area	Jayshree Amin	04/30/15 09:44	Retrieve from Storage
JB93030-3.3	Jayshree Amin	Secured Storage	04/30/15 16:49	Return to Storage
JB93030-3.3	Secured Storage	Todd Shoemaker	05/05/15 09:32	Retrieve from Storage
JB93030-3.3	Todd Shoemaker	Hannah Coffin	05/05/15 09:33	Custody Transfer
JB93030-3.3	Hannah Coffin	Secured Storage	05/05/15 16:03	Return to Storage
JB93030-3.3	Secured Storage	Bernadette Vassilatos	05/06/15 08:10	Retrieve from Storage
JB93030-3.3	Bernadette Vassilatos	Secured Staging Area	05/06/15 08:10	Return to Storage
JB93030-3.3	Secured Staging Area	Hannah Coffin	05/06/15 08:40	Retrieve from Storage
JB93030-3.3	Hannah Coffin	Secured Storage	05/06/15 15:44	Return to Storage
JB93030-3.3	Secured Storage	Gage Donahue	05/07/15 06:46	Retrieve from Storage
JB93030-3.3	Gage Donahue	Secured Staging Area	05/07/15 06:46	Return to Storage
JB93030-3.3	Secured Staging Area	Hannah Coffin	05/07/15 08:35	Retrieve from Storage
JB93030-3.3	Hannah Coffin	Secured Storage	05/07/15 15:30	Return to Storage
JB93030-3.4	Secured Storage	Todd Shoemaker	05/01/15 11:49	Retrieve from Storage
JB93030-3.4	Todd Shoemaker	Brian Schneller	05/01/15 11:50	Custody Transfer
JB93030-3.4	Brian Schneller	Secured Storage	05/01/15 20:26	Return to Storage
JB93030-3.5	Secured Storage	Dawan Currie	04/22/15 21:41	Retrieve from Storage
JB93030-3.5	Dawan Currie	Secured Staging Area	04/22/15 21:41	Return to Storage
JB93030-3.5	Secured Staging Area	Jeremy Miles	04/22/15 21:45	Retrieve from Storage
JB93030-3.5	Jeremy Miles	Secured Storage	04/22/15 23:23	Return to Storage
JB93030-3.5	Secured Storage	Luis Villanueva	04/25/15 08:53	Retrieve from Storage
JB93030-3.5	Luis Villanueva	Secured Staging Area	04/25/15 08:53	Return to Storage
JB93030-3.5	Secured Staging Area	Krimesh Patel	04/25/15 16:20	Retrieve from Storage
JB93030-3.5	Krimesh Patel	Secured Storage	04/25/15 16:54	Return to Storage
JB93030-3.5	Secured Storage	Dwayne Johnson	05/01/15 09:41	Retrieve from Storage
JB93030-3.5	Dwayne Johnson	Secured Staging Area	05/01/15 09:42	Return to Storage
JB93030-3.5	Secured Staging Area	Chris Brunson	05/01/15 15:31	Retrieve from Storage
JB93030-3.5	Chris Brunson	Secured Storage	05/01/15 17:32	Return to Storage
JB93030-3.6	Secured Storage	Bridget Kelly	04/24/15 15:45	Retrieve from Storage
JB93030-3.6	Bridget Kelly	GCMS2B	04/24/15 15:45	Load on Instrument

## Accutest Internal Chain of Custody

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**Job Number:** JB93030  
**Account:** CORNNYM Cornerstone Environmental Group, LLC  
**Project:** E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ  
**Received:** 04/22/15

Sample/Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JB93030-3.6	GCMS2B	Bridget Kelly	04/27/15 09:42	Unload from Instrument
JB93030-3.6	Bridget Kelly	Secured Storage	04/27/15 09:42	Return to Storage
JB93030-3.7	Secured Storage	Bridget Kelly	04/24/15 15:45	Retrieve from Storage
JB93030-3.7	Bridget Kelly	GCMS2B	04/24/15 15:45	Load on Instrument
JB93030-3.7	GCMS2B	Bridget Kelly	04/27/15 09:42	Unload from Instrument
JB93030-3.7	Bridget Kelly	Secured Storage	04/27/15 09:42	Return to Storage
JB93030-3F.2	Secured Storage	Alfredo Crespo	04/28/15 07:18	Retrieve from Storage
JB93030-3F.2	Alfredo Crespo	Secured Staging Area	04/28/15 07:18	Return to Storage
JB93030-3F.2	Secured Staging Area	Francis Pandolfo	04/28/15 08:07	Retrieve from Storage
JB93030-3F.2	Francis Pandolfo	Secured Storage	04/28/15 08:58	Return to Storage
JB93030-3F.2	Secured Storage	Francis Pandolfo	04/28/15 09:02	Retrieve from Storage
JB93030-3F.2	Francis Pandolfo	Secured Storage	04/28/15 10:46	Return to Storage
JB93030-3F.2.1	Francis Pandolfo	Metals Digestion	04/28/15 10:45	Digestate from JB93030-3F.2
JB93030-3F.2.1	Metals Digestion	Francis Pandolfo	04/28/15 10:45	Digestate from JB93030-3F.2
JB93030-3F.2.1	Francis Pandolfo	Metals Digestate Storage	04/28/15 10:45	Return to Storage
JB93030-4.1	Secured Storage	Bridget Kelly	04/24/15 15:45	Retrieve from Storage
JB93030-4.1	Bridget Kelly	GCMS2B	04/24/15 15:45	Load on Instrument
JB93030-4.1	GCMS2B	Bridget Kelly	04/27/15 09:42	Unload from Instrument
JB93030-4.1	Bridget Kelly	Secured Storage	04/27/15 09:42	Return to Storage
JB93030-5.1	Secured Storage	Alfredo Crespo	04/28/15 07:18	Retrieve from Storage
JB93030-5.1	Alfredo Crespo	Secured Staging Area	04/28/15 07:18	Return to Storage
JB93030-5.1	Secured Staging Area	Francis Pandolfo	04/28/15 08:07	Retrieve from Storage
JB93030-5.1	Francis Pandolfo	Secured Storage	04/28/15 08:58	Return to Storage
JB93030-5.1	Secured Storage	Francis Pandolfo	04/28/15 09:02	Retrieve from Storage
JB93030-5.1	Francis Pandolfo	Secured Storage	04/28/15 10:46	Return to Storage
JB93030-5.1.1	Francis Pandolfo	Metals Digestion	04/28/15 10:45	Digestate from JB93030-5.1
JB93030-5.1.1	Metals Digestion	Francis Pandolfo	04/28/15 10:45	Digestate from JB93030-5.1
JB93030-5.1.1	Francis Pandolfo	Metals Digestate Storage	04/28/15 10:45	Return to Storage
JB93030-5.3	Secured Storage	Gage Donahue	04/25/15 16:49	Retrieve from Storage
JB93030-5.3	Gage Donahue	Secured Staging Area	04/25/15 16:49	Return to Storage
JB93030-5.3	Secured Staging Area	Krimesh Patel	04/26/15 12:13	Retrieve from Storage
JB93030-5.3	Krimesh Patel	Secured Storage	04/26/15 15:31	Return to Storage
JB93030-5.3	Secured Storage	Bernadette Vassilatos	04/27/15 07:47	Retrieve from Storage
JB93030-5.3	Bernadette Vassilatos	Secured Staging Area	04/27/15 07:47	Return to Storage
JB93030-5.3	Secured Staging Area	Beatrice Marcelino	04/27/15 09:00	Retrieve from Storage
JB93030-5.3	Beatrice Marcelino	Secured Storage	04/27/15 16:21	Return to Storage
JB93030-5.3	Secured Storage	Gage Donahue	04/30/15 09:40	Retrieve from Storage

## Accutest Internal Chain of Custody

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**Job Number:** JB93030  
**Account:** CORNNYM Cornerstone Environmental Group, LLC  
**Project:** E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ  
**Received:** 04/22/15

Sample/Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JB93030-5.3	Gage Donahue	Secured Staging Area	04/30/15 09:40	Return to Storage
JB93030-5.3	Secured Staging Area	Jayshree Amin	04/30/15 09:44	Retrieve from Storage
JB93030-5.3	Jayshree Amin	Secured Storage	04/30/15 16:49	Return to Storage
JB93030-5.3	Secured Storage	Todd Shoemaker	05/05/15 09:32	Retrieve from Storage
JB93030-5.3	Todd Shoemaker	Hannah Coffin	05/05/15 09:33	Custody Transfer
JB93030-5.3	Hannah Coffin	Secured Storage	05/05/15 16:03	Return to Storage
JB93030-5.3	Secured Storage	Bernadette Vassilatos	05/06/15 08:10	Retrieve from Storage
JB93030-5.3	Bernadette Vassilatos	Secured Staging Area	05/06/15 08:10	Return to Storage
JB93030-5.3	Secured Staging Area	Hannah Coffin	05/06/15 08:40	Retrieve from Storage
JB93030-5.3	Hannah Coffin	Secured Storage	05/06/15 15:44	Return to Storage
JB93030-5.3	Secured Storage	Gage Donahue	05/07/15 06:46	Retrieve from Storage
JB93030-5.3	Gage Donahue	Secured Staging Area	05/07/15 06:46	Return to Storage
JB93030-5.3	Secured Staging Area	Hannah Coffin	05/07/15 08:35	Retrieve from Storage
JB93030-5.3	Hannah Coffin	Secured Storage	05/07/15 15:30	Return to Storage
JB93030-5.4	Secured Storage	Todd Shoemaker	05/01/15 11:49	Retrieve from Storage
JB93030-5.4	Todd Shoemaker	Brian Schneller	05/01/15 11:50	Custody Transfer
JB93030-5.4	Brian Schneller	Secured Storage	05/01/15 20:26	Return to Storage
JB93030-5.5	Secured Storage	Dawan Currie	04/22/15 21:41	Retrieve from Storage
JB93030-5.5	Dawan Currie	Secured Staging Area	04/22/15 21:41	Return to Storage
JB93030-5.5	Secured Staging Area	Jeremy Miles	04/22/15 21:45	Retrieve from Storage
JB93030-5.5	Jeremy Miles	Secured Storage	04/22/15 23:23	Return to Storage
JB93030-5.5	Secured Storage	Luis Villanueva	04/25/15 08:53	Retrieve from Storage
JB93030-5.5	Luis Villanueva	Secured Staging Area	04/25/15 08:53	Return to Storage
JB93030-5.5	Secured Staging Area	Krimesh Patel	04/25/15 16:20	Retrieve from Storage
JB93030-5.5	Krimesh Patel	Secured Storage	04/25/15 16:54	Return to Storage
JB93030-5.5	Secured Storage	Dwayne Johnson	05/01/15 09:41	Retrieve from Storage
JB93030-5.5	Dwayne Johnson	Secured Staging Area	05/01/15 09:42	Return to Storage
JB93030-5.5	Secured Staging Area	Chris Brunson	05/01/15 15:31	Retrieve from Storage
JB93030-5.5	Chris Brunson	Secured Storage	05/01/15 17:32	Return to Storage
JB93030-5.6	Secured Storage	Bridget Kelly	04/24/15 15:45	Retrieve from Storage
JB93030-5.6	Bridget Kelly	GCMS2B	04/24/15 15:45	Load on Instrument
JB93030-5.6	GCMS2B	Bridget Kelly	04/27/15 09:42	Unload from Instrument
JB93030-5.6	Bridget Kelly	Secured Storage	04/27/15 09:42	Return to Storage
JB93030-5F.2	Secured Storage	Alfredo Crespo	04/28/15 07:18	Retrieve from Storage
JB93030-5F.2	Alfredo Crespo	Secured Staging Area	04/28/15 07:18	Return to Storage
JB93030-5F.2	Secured Staging Area	Francis Pandolfo	04/28/15 08:07	Retrieve from Storage
JB93030-5F.2	Francis Pandolfo	Secured Storage	04/28/15 08:58	Return to Storage
JB93030-5F.2	Secured Storage	Francis Pandolfo	04/28/15 09:02	Retrieve from Storage
JB93030-5F.2	Francis Pandolfo	Secured Storage	04/28/15 10:46	Return to Storage

## Accutest Internal Chain of Custody

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**Job Number:** JB93030  
**Account:** CORNNYM Cornerstone Environmental Group, LLC  
**Project:** E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ  
**Received:** 04/22/15

Sample/Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JB93030-5F.2.1	Francis Pandolfo	Metals Digestion	04/28/15 10:45	Digestate from JB93030-5F.2
JB93030-5F.2.1	Metals Digestion	Francis Pandolfo	04/28/15 10:45	Digestate from JB93030-5F.2
JB93030-5F.2.1	Francis Pandolfo	Metals Digestate Storage	04/28/15 10:45	Return to Storage
JB93030-6.1	Secured Storage	Bridget Kelly	04/24/15 15:45	Retrieve from Storage
JB93030-6.1	Bridget Kelly	GCMS2B	04/24/15 15:45	Load on Instrument
JB93030-6.1	GCMS2B	Bridget Kelly	04/27/15 09:42	Unload from Instrument
JB93030-6.1	Bridget Kelly	Secured Storage	04/27/15 09:42	Return to Storage
JB93030-7.1	Secured Storage	Bridget Kelly	04/24/15 15:45	Retrieve from Storage
JB93030-7.1	Bridget Kelly	GCMS2B	04/24/15 15:45	Load on Instrument
JB93030-7.1	GCMS2B	Bridget Kelly	04/27/15 09:42	Unload from Instrument
JB93030-7.1	Bridget Kelly	Secured Storage	04/27/15 09:42	Return to Storage
JB93030-8.1	Secured Storage	Bridget Kelly	04/24/15 15:45	Retrieve from Storage
JB93030-8.1	Bridget Kelly	GCMS2B	04/24/15 15:45	Load on Instrument
JB93030-8.1	GCMS2B	Bridget Kelly	04/27/15 09:42	Unload from Instrument
JB93030-8.1	Bridget Kelly	Secured Storage	04/27/15 09:42	Return to Storage
JB93030-9.1	Secured Storage	Alfredo Crespo	04/28/15 07:18	Retrieve from Storage
JB93030-9.1	Alfredo Crespo	Secured Staging Area	04/28/15 07:18	Return to Storage
JB93030-9.1	Secured Staging Area	Francis Pandolfo	04/28/15 08:07	Retrieve from Storage
JB93030-9.1	Francis Pandolfo	Secured Storage	04/28/15 08:58	Return to Storage
JB93030-9.1	Secured Storage	Francis Pandolfo	04/28/15 09:02	Retrieve from Storage
JB93030-9.1	Francis Pandolfo	Secured Storage	04/28/15 10:46	Return to Storage
JB93030-9.1.1	Francis Pandolfo	Metals Digestion	04/28/15 10:45	Digestate from JB93030-9.1
JB93030-9.1.1	Metals Digestion	Francis Pandolfo	04/28/15 10:45	Digestate from JB93030-9.1
JB93030-9.1.1	Francis Pandolfo	Metals Digestate Storage	04/28/15 10:45	Return to Storage
JB93030-9.3	Secured Storage	Gage Donahue	04/25/15 16:49	Retrieve from Storage
JB93030-9.3	Gage Donahue	Secured Staging Area	04/25/15 16:49	Return to Storage
JB93030-9.3	Secured Staging Area	Krimesh Patel	04/26/15 12:13	Retrieve from Storage
JB93030-9.3	Krimesh Patel	Secured Storage	04/26/15 15:31	Return to Storage
JB93030-9.3	Secured Storage	Bernadette Vassilatos	04/27/15 07:47	Retrieve from Storage
JB93030-9.3	Bernadette Vassilatos	Secured Staging Area	04/27/15 07:47	Return to Storage
JB93030-9.3	Secured Staging Area	Beatrice Marcelino	04/27/15 09:00	Retrieve from Storage
JB93030-9.3	Beatrice Marcelino	Secured Storage	04/27/15 16:21	Return to Storage
JB93030-9.3	Secured Storage	Gage Donahue	04/30/15 09:40	Retrieve from Storage
JB93030-9.3	Gage Donahue	Secured Staging Area	04/30/15 09:40	Return to Storage
JB93030-9.3	Secured Staging Area	Jayshree Amin	04/30/15 09:44	Retrieve from Storage
JB93030-9.3	Jayshree Amin	Secured Storage	04/30/15 16:49	Return to Storage
JB93030-9.3	Secured Storage	Todd Shoemaker	05/05/15 09:32	Retrieve from Storage
JB93030-9.3	Todd Shoemaker	Hannah Coffin	05/05/15 09:33	Custody Transfer

## Accutest Internal Chain of Custody

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**Job Number:** JB93030  
**Account:** CORNNYM Cornerstone Environmental Group, LLC  
**Project:** E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ  
**Received:** 04/22/15

Sample/Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JB93030-9.3	Hannah Coffin	Secured Storage	05/05/15 16:03	Return to Storage
JB93030-9.3	Secured Storage	Bernadette Vassilatos	05/06/15 08:10	Retrieve from Storage
JB93030-9.3	Bernadette Vassilatos	Secured Staging Area	05/06/15 08:10	Return to Storage
JB93030-9.3	Secured Staging Area	Hannah Coffin	05/06/15 08:40	Retrieve from Storage
JB93030-9.3	Hannah Coffin	Secured Storage	05/06/15 15:44	Return to Storage
JB93030-9.3	Secured Storage	Gage Donahue	05/07/15 06:46	Retrieve from Storage
JB93030-9.3	Gage Donahue	Secured Staging Area	05/07/15 06:46	Return to Storage
JB93030-9.3	Secured Staging Area	Hannah Coffin	05/07/15 08:35	Retrieve from Storage
JB93030-9.3	Hannah Coffin	Secured Storage	05/07/15 15:30	Return to Storage
JB93030-9.4	Secured Storage	Todd Shoemaker	05/01/15 11:49	Retrieve from Storage
JB93030-9.4	Todd Shoemaker	Brian Schneller	05/01/15 11:50	Custody Transfer
JB93030-9.4	Brian Schneller	Secured Storage	05/01/15 20:26	Return to Storage
JB93030-9.5	Secured Storage	Dawan Currie	04/22/15 21:41	Retrieve from Storage
JB93030-9.5	Dawan Currie	Secured Staging Area	04/22/15 21:41	Return to Storage
JB93030-9.5	Secured Staging Area	Jeremy Miles	04/22/15 21:45	Retrieve from Storage
JB93030-9.5	Jeremy Miles	Secured Storage	04/22/15 23:23	Return to Storage
JB93030-9.5	Secured Storage	Luis Villanueva	04/25/15 08:53	Retrieve from Storage
JB93030-9.5	Luis Villanueva	Secured Staging Area	04/25/15 08:53	Return to Storage
JB93030-9.5	Secured Staging Area	Krimesh Patel	04/25/15 16:20	Retrieve from Storage
JB93030-9.5	Krimesh Patel	Secured Storage	04/25/15 16:54	Return to Storage
JB93030-9.5	Secured Storage	Dwayne Johnson	05/01/15 09:41	Retrieve from Storage
JB93030-9.5	Dwayne Johnson	Secured Staging Area	05/01/15 09:42	Return to Storage
JB93030-9.5	Secured Staging Area	Chris Brunson	05/01/15 15:31	Retrieve from Storage
JB93030-9.5	Chris Brunson	Secured Storage	05/01/15 17:32	Return to Storage
JB93030-9.6	Secured Storage	Bridget Kelly	04/24/15 15:45	Retrieve from Storage
JB93030-9.6	Bridget Kelly	GCMS2B	04/24/15 15:45	Load on Instrument
JB93030-9.6	GCMS2B	Bridget Kelly	04/27/15 09:42	Unload from Instrument
JB93030-9.6	Bridget Kelly	Secured Storage	04/27/15 09:42	Return to Storage
JB93030-9F.2	Secured Storage	Alfredo Crespo	04/28/15 07:18	Retrieve from Storage
JB93030-9F.2	Alfredo Crespo	Secured Staging Area	04/28/15 07:18	Return to Storage
JB93030-9F.2	Secured Staging Area	Francis Pandolfo	04/28/15 08:07	Retrieve from Storage
JB93030-9F.2	Francis Pandolfo	Secured Storage	04/28/15 08:58	Return to Storage
JB93030-9F.2	Secured Storage	Francis Pandolfo	04/28/15 09:02	Retrieve from Storage
JB93030-9F.2	Francis Pandolfo	Secured Storage	04/28/15 10:46	Return to Storage
JB93030-9F.2.1	Francis Pandolfo	Metals Digestion	04/28/15 10:45	Digestate from JB93030-9F.2
JB93030-9F.2.1	Metals Digestion	Francis Pandolfo	04/28/15 10:45	Digestate from JB93030-9F.2
JB93030-9F.2.1	Francis Pandolfo	Metals Digestate Storage	04/28/15 10:45	Return to Storage
JB93030-10.1	Secured Storage	Bridget Kelly	04/24/15 15:45	Retrieve from Storage

## Accutest Internal Chain of Custody

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Job Number: JB93030

Account: CORNNYM Cornerstone Environmental Group, LLC

Project: E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ

Received: 04/22/15

Sample/Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JB93030-10.1	Bridget Kelly	GCMS2B	04/24/15 15:45	Load on Instrument
JB93030-10.1	GCMS2B	Bridget Kelly	04/27/15 09:42	Unload from Instrument
JB93030-10.1	Bridget Kelly	Secured Storage	04/27/15 09:42	Return to Storage



05/12/15

Technical Report for

Cornerstone Environmental Group, LLC

E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ  
140802

Accutest Job Number: JB93282

Sampling Date: 04/24/15

Report to:

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Total number of pages in report: **354**



Test results contained within this data package meet the requirements  
of the National Environmental Laboratory Accreditation Program  
and/or state specific certification programs as applicable.

*Nancy F. Cole*

Nancy Cole  
Laboratory Director

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Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, IL, IN, KS, KY, LA, MA, MD, MI, MT, NC,  
OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TN, VA, WV, DoD ELAP (L-A-B L2248)

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Test results relate only to samples analyzed.

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## Sample Summary

Cornerstone Environmental Group, LLC

Job No: JB93282

E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ  
Project No: 140802

Sample Number	Collected Date	Time By	Matrix Received	Code Type	Client Sample ID	
JB93282-1	04/24/15	11:00 JK	04/24/15	AQ	Ground Water	PMP-180-042415
JB93282-1F	04/24/15	11:00 JK	04/24/15	AQ	Groundwater Filtered	PMP-180-042415
JB93282-2	04/24/15	12:30 JK	04/24/15	AQ	Ground Water	PMP-230-042415
JB93282-2F	04/24/15	12:30 JK	04/24/15	AQ	Groundwater Filtered	PMP-230-042415
JB93282-3	04/24/15	12:30 JK	04/24/15	AQ	Trip Blank Water	TRIP BLANK 4-23-15



## CASE NARRATIVE / CONFORMANCE SUMMARY

**Client:** Cornerstone Environmental Group, LLC

**Job No** JB93282

**Site:** E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ

**Report Date** 5/12/2015 9:43:51 AM

On 04/24/2015, 2 Sample(s), 1 Trip Blank(s) and 0 Field Blank(s) were received at Accutest Laboratories at a temperature of 1.4 C. Samples were intact and chemically preserved, unless noted below. An Accutest Job Number of JB93282 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

### Volatiles by GCMS By Method SW846 8260C

**Matrix:** AQ

**Batch ID:** V4B2188

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB93530-16MS, JB93530-16MSD were used as the QC samples indicated.

### Metals By Method SW846 6010C

**Matrix:** AQ

**Batch ID:** MP86146

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB93243-3MS, JB93243-3MSD, JB93243-3SDL were used as the QC samples for metals.

### Wet Chemistry By Method EPA 300/SW846 9056A

**Matrix:** AQ

**Batch ID:** GP88923

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB93284-6DUP, JB93284-6MS were used as the QC samples for Sulfate.

### Wet Chemistry By Method EPA 353.2/LACHAT

**Matrix:** AQ

**Batch ID:** GP88783

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB93284-6MS, JB93284-6DUP were used as the QC samples for Nitrogen, Nitrate + Nitrite.
- RPD(s) for Duplicate for Nitrogen, Nitrate + Nitrite are outside control limits for sample GP88783-D1. RPD acceptable due to low duplicate and sample concentrations.

## Wet Chemistry By Method EPA353.2/SM4500NO2B

**Matrix:** AQ

**Batch ID:** R143681

- The data for EPA353.2/SM4500NO2B meets quality control requirements.
- JB93282-1 for Nitrogen, Nitrate: Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

**Matrix:** AQ

**Batch ID:** R143682

- The data for EPA353.2/SM4500NO2B meets quality control requirements.
- JB93282-2 for Nitrogen, Nitrate: Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

## Wet Chemistry By Method SM2320 B-11

**Matrix:** AQ

**Batch ID:** GN24584

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB93199-3DUP were used as the QC samples for Alkalinity, Total as CaCO<sub>3</sub>.

## Wet Chemistry By Method SM2540 C-11

**Matrix:** AQ

**Batch ID:** GN24465

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB93284-6DUP were used as the QC samples for Solids, Total Dissolved.

## Wet Chemistry By Method SM4500CO2 D-11

**Matrix:** AQ

**Batch ID:** GN24598

- The data for SM4500CO2 D-11 meets quality control requirements.

## Wet Chemistry By Method SM4500NO2 B-11

**Matrix:** AQ

**Batch ID:** GN24081

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB93181-9DUP, JB93181-9MS were used as the QC samples for Nitrogen, Nitrite.

Accutest certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting Accutest's Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

Accutest Laboratories is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by Accutest Laboratories indicated via signature on the report cover

## Summary of Hits

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Job Number: JB93282

Account: Cornerstone Environmental Group, LLC

Project: E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ

Collected: 04/24/15

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Lab Sample ID Analyte	Client Sample ID Qual	Result/ RL	MDL	Units	Method
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### JB93282-1 PMP-180-042415

Benzene	2.3	0.50	0.24	ug/l	SW846 8260C
Chlorobenzene	0.49 J	1.0	0.19	ug/l	SW846 8260C
Chloroethane	7.9	1.0	0.34	ug/l	SW846 8260C
Cyclohexane	0.42 J	5.0	0.28	ug/l	SW846 8260C
Isopropylbenzene	0.64 J	1.0	0.23	ug/l	SW846 8260C
Calcium	57000	5000		ug/l	SW846 6010C
Iron	91600	100		ug/l	SW846 6010C
Alkalinity, Bicarbonate	239	5.0		mg/l	SM4500CO2 D-11
Alkalinity, Total as CaCO3	239	13		mg/l	SM2320 B-11
Chloride	2.5	2.0		mg/l	EPA 300/SW846 9056A
Nitrogen, Nitrate <sup>a</sup>	0.43	0.11		mg/l	EPA353.2/SM4500NO2B
Nitrogen, Nitrate + Nitrite	0.43	0.10		mg/l	EPA 353.2/LACHAT
Solids, Total Dissolved	203	25		mg/l	SM2540 C-11

### JB93282-1F PMP-180-042415

Calcium	58600	5000		ug/l	SW846 6010C
Iron	93600	100		ug/l	SW846 6010C

### JB93282-2 PMP-230-042415

Benzene	7.8	0.50	0.24	ug/l	SW846 8260C
Chlorobenzene	1.4	1.0	0.19	ug/l	SW846 8260C
Chloroethane	29.1	1.0	0.34	ug/l	SW846 8260C
Cyclohexane	1.3 J	5.0	0.28	ug/l	SW846 8260C
1,4-Dichlorobenzene	0.51 J	1.0	0.27	ug/l	SW846 8260C
1,1-Dichloroethane	0.75 J	1.0	0.17	ug/l	SW846 8260C
cis-1,2-Dichloroethene	0.61 J	1.0	0.27	ug/l	SW846 8260C
Isopropylbenzene	1.8	1.0	0.23	ug/l	SW846 8260C
Methylcyclohexane	0.37 J	5.0	0.22	ug/l	SW846 8260C
Toluene	0.20 J	1.0	0.16	ug/l	SW846 8260C
Vinyl chloride	0.43 J	1.0	0.15	ug/l	SW846 8260C
Xylene (total)	0.83 J	1.0	0.17	ug/l	SW846 8260C
Calcium	25300	5000		ug/l	SW846 6010C
Iron	38000	100		ug/l	SW846 6010C
Alkalinity, Bicarbonate	96.8	5.0		mg/l	SM4500CO2 D-11
Alkalinity, Total as CaCO3	96.8	13		mg/l	SM2320 B-11
Solids, Total Dissolved	118	17		mg/l	SM2540 C-11

### JB93282-2F PMP-230-042415

Calcium	23800	5000		ug/l	SW846 6010C
Iron	35800	100		ug/l	SW846 6010C

**Summary of Hits**

Job Number: JB93282  
Account: Cornerstone Environmental Group, LLC  
Project: E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ  
Collected: 04/24/15

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Lab Sample ID	Client Sample ID	Result/ Analyte	Qual	RL	MDL	Units	Method
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**JB93282-3 TRIP BLANK 4-23-15**

No hits reported in this sample.

(a) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)



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## Sample Results

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## Report of Analysis

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Accutest Laboratories

**Report of Analysis**

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<b>Client Sample ID:</b>	PMP-180-042415	<b>Date Sampled:</b>	04/24/15
<b>Lab Sample ID:</b>	JB93282-1	<b>Date Received:</b>	04/24/15
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260C		
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1	4B51677.D	1	05/04/15	TP	n/a	n/a	V4B2188
Run #2							

	<b>Purge Volume</b>
Run #1	5.0 ml
Run #2	

**VOA TCL List (OLM4.2)**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
67-64-1	Acetone	ND	10	3.3	ug/l	
71-43-2	Benzene	2.3	0.50	0.24	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	1.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.42	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	5.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.25	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.22	ug/l	
108-90-7	Chlorobenzene	0.49	1.0	0.19	ug/l	J
75-00-3	Chloroethane	7.9	1.0	0.34	ug/l	
67-66-3	Chloroform	ND	1.0	0.19	ug/l	
74-87-3	Chloromethane	ND	1.0	0.41	ug/l	
110-82-7	Cyclohexane	0.42	5.0	0.28	ug/l	J
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.99	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.15	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.23	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.19	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.23	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.27	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.90	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.17	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.51	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.27	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.65	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.39	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.52	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.7	ug/l	
98-82-8	Isopropylbenzene	0.64	1.0	0.23	ug/l	J

ND = Not detected      MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

<b>Client Sample ID:</b>	PMP-180-042415	<b>Date Sampled:</b>	04/24/15
<b>Lab Sample ID:</b>	JB93282-1	<b>Date Received:</b>	04/24/15
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260C		
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

**VOA TCL List (OLM4.2)**

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.0	1.9	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.22	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.24	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.73	ug/l	
100-42-5	Styrene	ND	1.0	0.27	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.40	ug/l	
108-88-3	Toluene	ND	1.0	0.16	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.21	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.21	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.43	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.15	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		76-120%
17060-07-0	1,2-Dichloroethane-D4	105%		73-122%
2037-26-5	Toluene-D8	99%		84-119%
460-00-4	4-Bromofluorobenzene	103%		78-117%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
Total TIC, Volatile			0	ug/l	
Total Alkanes			0	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

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<b>Client Sample ID:</b>	PMP-180-042415	<b>Date Sampled:</b>	04/24/15
<b>Lab Sample ID:</b>	JB93282-1	<b>Date Received:</b>	04/24/15
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

**Total Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium	57000	5000	ug/l	1	04/30/15	05/01/15	ND	SW846 6010C <sup>1</sup>
Iron	91600	100	ug/l	1	04/30/15	05/01/15	ND	SW846 6010C <sup>1</sup>
Magnesium	< 5000	5000	ug/l	1	04/30/15	05/01/15	ND	SW846 6010C <sup>1</sup>
Sodium	< 10000	10000	ug/l	1	04/30/15	05/01/15	ND	SW846 6010C <sup>1</sup>

(1) Instrument QC Batch: MA36561

(2) Prep QC Batch: MP86146

RL = Reporting Limit

**Report of Analysis**

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<b>Client Sample ID:</b>	PMP-180-042415	<b>Date Sampled:</b>	04/24/15
<b>Lab Sample ID:</b>	JB93282-1	<b>Date Received:</b>	04/24/15
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

**General Chemistry**

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Bicarbonate	239	5.0	mg/l	1	05/02/15	CB	SM4500CO2 D-11
Alkalinity, Total as CaCO3	239	13	mg/l	1	05/02/15 12:45	CB	SM2320 B-11
Chloride	2.5	2.0	mg/l	1	05/09/15 23:39	SK	EPA 300/SW846 9056A
Nitrogen, Nitrate <sup>a</sup>	0.43	0.11	mg/l	1	05/05/15 14:06	BS	EPA353.2/SM4500NO2B
Nitrogen, Nitrate + Nitrite	0.43	0.10	mg/l	1	05/05/15 14:06	BS	EPA 353.2/LACHAT
Nitrogen, Nitrite	< 0.010	0.010	mg/l	1	04/24/15 21:20	HS	SM4500NO2 B-11
Solids, Total Dissolved	203	25	mg/l	1	04/30/15	BM	SM2540 C-11
Sulfate	< 10	10	mg/l	1	05/09/15 23:39	SK	EPA 300/SW846 9056A

(a) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

RL = Reporting Limit

**Report of Analysis**

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<b>Client Sample ID:</b>	PMP-180-042415	<b>Date Sampled:</b>	04/24/15
<b>Lab Sample ID:</b>	JB93282-1F	<b>Date Received:</b>	04/24/15
<b>Matrix:</b>	AQ - Groundwater Filtered	<b>Percent Solids:</b>	n/a
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

**Dissolved Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium	58600	5000	ug/l	1	04/30/15	05/01/15	ND	SW846 6010C <sup>1</sup>
Iron	93600	100	ug/l	1	04/30/15	05/01/15	ND	SW846 6010C <sup>1</sup>
Magnesium	< 5000	5000	ug/l	1	04/30/15	05/01/15	ND	SW846 6010C <sup>1</sup>
Sodium	< 10000	10000	ug/l	1	04/30/15	05/01/15	ND	SW846 6010C <sup>1</sup>
								SW846 3010A <sup>2</sup>

(1) Instrument QC Batch: MA36561

(2) Prep QC Batch: MP86146

RL = Reporting Limit

Accutest Laboratories

**Report of Analysis**

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4

<b>Client Sample ID:</b>	PMP-230-042415	<b>Date Sampled:</b>	04/24/15
<b>Lab Sample ID:</b>	JB93282-2	<b>Date Received:</b>	04/24/15
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260C		
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1	4B51678.D	1	05/04/15	TP	n/a	n/a	V4B2188
Run #2							

	<b>Purge Volume</b>
Run #1	5.0 ml
Run #2	

**VOA TCL List (OLM4.2)**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
67-64-1	Acetone	ND	10	3.3	ug/l	
71-43-2	Benzene	7.8	0.50	0.24	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	1.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.42	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	5.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.25	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.22	ug/l	
108-90-7	Chlorobenzene	1.4	1.0	0.19	ug/l	
75-00-3	Chloroethane	29.1	1.0	0.34	ug/l	
67-66-3	Chloroform	ND	1.0	0.19	ug/l	
74-87-3	Chloromethane	ND	1.0	0.41	ug/l	
110-82-7	Cyclohexane	1.3	5.0	0.28	ug/l	J
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.99	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.15	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.23	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.19	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.23	ug/l	
106-46-7	1,4-Dichlorobenzene	0.51	1.0	0.27	ug/l	J
75-71-8	Dichlorodifluoromethane	ND	2.0	0.90	ug/l	
75-34-3	1,1-Dichloroethane	0.75	1.0	0.17	ug/l	J
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.51	ug/l	
156-59-2	cis-1,2-Dichloroethene	0.61	1.0	0.27	ug/l	J
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.65	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.39	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.52	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.7	ug/l	
98-82-8	Isopropylbenzene	1.8	1.0	0.23	ug/l	

ND = Not detected      MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

<b>Client Sample ID:</b>	PMP-230-042415	<b>Date Sampled:</b>	04/24/15
<b>Lab Sample ID:</b>	JB93282-2	<b>Date Received:</b>	04/24/15
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260C		
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

**VOA TCL List (OLM4.2)**

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.0	1.9	ug/l	
108-87-2	Methylcyclohexane	0.37	5.0	0.22	ug/l	J
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.24	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.73	ug/l	
100-42-5	Styrene	ND	1.0	0.27	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.40	ug/l	
108-88-3	Toluene	0.20	1.0	0.16	ug/l	J
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.21	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.21	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.43	ug/l	
75-01-4	Vinyl chloride	0.43	1.0	0.15	ug/l	J
1330-20-7	Xylene (total)	0.83	1.0	0.17	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		76-120%
17060-07-0	1,2-Dichloroethane-D4	107%		73-122%
2037-26-5	Toluene-D8	100%		84-119%
460-00-4	4-Bromofluorobenzene	102%		78-117%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
Total TIC, Volatile			0	ug/l	
Total Alkanes			0	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

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<b>Client Sample ID:</b>	PMP-230-042415	<b>Date Sampled:</b>	04/24/15
<b>Lab Sample ID:</b>	JB93282-2	<b>Date Received:</b>	04/24/15
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

**Total Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium	25300	5000	ug/l	1	04/30/15	05/01/15	ND	SW846 6010C <sup>1</sup>
Iron	38000	100	ug/l	1	04/30/15	05/01/15	ND	SW846 6010C <sup>1</sup>
Magnesium	< 5000	5000	ug/l	1	04/30/15	05/01/15	ND	SW846 6010C <sup>1</sup>
Sodium	< 10000	10000	ug/l	1	04/30/15	05/01/15	ND	SW846 6010C <sup>1</sup>

(1) Instrument QC Batch: MA36561

(2) Prep QC Batch: MP86146

RL = Reporting Limit

**Report of Analysis**

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<b>Client Sample ID:</b>	PMP-230-042415	<b>Date Sampled:</b>	04/24/15
<b>Lab Sample ID:</b>	JB93282-2	<b>Date Received:</b>	04/24/15
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

**General Chemistry**

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Bicarbonate	96.8	5.0	mg/l	1	05/02/15	CB	SM4500CO2 D-11
Alkalinity, Total as CaCO3	96.8	13	mg/l	1	05/02/15 12:45	CB	SM2320 B-11
Chloride	< 2.0	2.0	mg/l	1	05/10/15 00:03	SK	EPA 300/SW846 9056A
Nitrogen, Nitrate <sup>a</sup>	< 0.11	0.11	mg/l	1	05/05/15 14:07	BS	EPA353.2/SM4500NO2B
Nitrogen, Nitrate + Nitrite	< 0.10	0.10	mg/l	1	05/05/15 14:07	BS	EPA 353.2/LACHAT
Nitrogen, Nitrite	< 0.010	0.010	mg/l	1	04/24/15 21:20	HS	SM4500NO2 B-11
Solids, Total Dissolved	118	17	mg/l	1	04/30/15	BM	SM2540 C-11
Sulfate	< 10	10	mg/l	1	05/10/15 00:03	SK	EPA 300/SW846 9056A

(a) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

RL = Reporting Limit

**Report of Analysis**

Page 1 of 1

<b>Client Sample ID:</b>	PMP-230-042415	<b>Date Sampled:</b>	04/24/15
<b>Lab Sample ID:</b>	JB93282-2F	<b>Date Received:</b>	04/24/15
<b>Matrix:</b>	AQ - Groundwater Filtered	<b>Percent Solids:</b>	n/a
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

**Dissolved Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium	23800	5000	ug/l	1	04/30/15	05/01/15	ND	SW846 6010C <sup>1</sup>
Iron	35800	100	ug/l	1	04/30/15	05/01/15	ND	SW846 6010C <sup>1</sup>
Magnesium	< 5000	5000	ug/l	1	04/30/15	05/01/15	ND	SW846 6010C <sup>1</sup>
Sodium	< 10000	10000	ug/l	1	04/30/15	05/01/15	ND	SW846 6010C <sup>1</sup>
								SW846 3010A <sup>2</sup>

(1) Instrument QC Batch: MA36561

(2) Prep QC Batch: MP86146

RL = Reporting Limit

Accutest Laboratories

**Report of Analysis**

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<b>Client Sample ID:</b>	TRIP BLANK 4-23-15	<b>Date Sampled:</b>	04/24/15
<b>Lab Sample ID:</b>	JB93282-3	<b>Date Received:</b>	04/24/15
<b>Matrix:</b>	AQ - Trip Blank Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260C		
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1	4B51676.D	1	05/04/15	TP	n/a	n/a	V4B2188
Run #2							

	<b>Purge Volume</b>
Run #1	5.0 ml
Run #2	

**VOA TCL List (OLM4.2)**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
67-64-1	Acetone	ND	10	3.3	ug/l	
71-43-2	Benzene	ND	0.50	0.24	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	1.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.42	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	5.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.25	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.22	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.19	ug/l	
75-00-3	Chloroethane	ND	1.0	0.34	ug/l	
67-66-3	Chloroform	ND	1.0	0.19	ug/l	
74-87-3	Chloromethane	ND	1.0	0.41	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.99	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.15	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.23	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.19	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.23	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.27	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.90	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.17	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.51	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.27	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.65	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.39	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.52	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.7	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.23	ug/l	

ND = Not detected      MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

**Report of Analysis**

<b>Client Sample ID:</b>	TRIP BLANK 4-23-15	<b>Date Sampled:</b>	04/24/15
<b>Lab Sample ID:</b>	JB93282-3	<b>Date Received:</b>	04/24/15
<b>Matrix:</b>	AQ - Trip Blank Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260C		
<b>Project:</b>	E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ		

**VOA TCL List (OLM4.2)**

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	5.0	1.9	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.22	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.24	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.73	ug/l	
100-42-5	Styrene	ND	1.0	0.27	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.21	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.40	ug/l	
108-88-3	Toluene	ND	1.0	0.16	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.21	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.21	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.43	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.15	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		76-120%
17060-07-0	1,2-Dichloroethane-D4	103%		73-122%
2037-26-5	Toluene-D8	99%		84-119%
460-00-4	4-Bromofluorobenzene	103%		78-117%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	
	Total Alkanes		0	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound



## Misc. Forms

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5

### Custody Documents and Other Forms

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Includes the following where applicable:

- Chain of Custody
- Sample Tracking Chronicle
- Internal Chain of Custody



AW  
WTB

## **CHAIN OF CUSTODY**

2235 Route 130, Dayton, NJ 08810  
TEL. 732-329-0200 FAX: 732-329-3499/3480  
[www.accutest.com](http://www.accutest.com)

## Impulse

PAGE 1 OF 1

FED-EX Tracking #		Bottle Order Control # MM - 1/23/2015 - 5			
Acuteus Quide # <del>19469</del> e203361		Acuteus Job # JB93282			
Requested Analysis (see TEST CODE sheet)				Matrix Codes	
VOC	V8260T2C92+	(H/C)		DW - Drinking Water	
NA,MS,PE,CA,NZL,GB,CHG	XN0303	None		GW - Ground Water	
TDS,SO4,CHG,b/c	XN030	2D (H,C,SO4)		WW - Water	
Crude				SW - Surface Water	
				SC - Soil	
				SL - Sludge	
				SED-Sediment	
				OI - Oil	
				LIQ - Other Liquid	
				AIR - Air	
				SOL - Other Solid	
				WP - Wipe	
				FB-Field Blank	
				EB-Equipment Blank	
				RB-Rinse Blank	
				TB-Trip Blank	
<b>LAB USE ONLY</b>					
3	-	-	-	A33	
3	-	-	-	C7	
				V871	
INITIAL ASSESSMENT <u>JF28</u>					
LABEL VERIFICATION <u>DJ</u>					

5.1

Client / Reporting Information		Project Information		Requested Analysis (see TEST CODE sheet)		Matrix Codes														
Company Name 100 Crystal Run Road Suite 100 Middletown N.Y 10941	Project Name: Ringwood - PMP-6W Sampling CADEN A 203361	Street Address Peter's Mill Rd Ringwood NJ	Billing Information (if different from Report to) Company Name Corrington Environmental Group 100 crystal Run Road	(H2O)			DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED-Sediment OI - Oil LIQ - Other Liquid GAS - Other Gas SOL - Other Solid WP - Wrap FB - Field Blank RB - Rinse Blank TB - Trip Blank													
Project Contact Tim.Roepel@corringtonny.com	E-mail 140802-0	City State Zip Ringwood NJ	City State Zip Middletown NY 10941																	
Phone # 845-695-0200	Fax # -	Client Purchase Order #	Attention: Tim Roepel	VOC	XN030	XN030	LAB USE ONLY A33 C7 V871													
Sample(s) Name(s) John Rieger/Andrew Koleski	Phone #	Project Manager Tim Roepel	Collection	Numer of preserved Bottles																
Accrued Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Date	Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DW/Blank	MEOH	ENCORE					
1F	PMP-180-042415		4-21-15	1100	ATV	6W	8									3	1	1	1	1
2F	PMP-230-042415		4-21-15	1230	ATV	6W	8									3	1	1	1	1
3	TDR-180-AK 4-23-15		4-23-15	0900	-	DW	2													
Turnaround Time (Business days)		Data Deliverable Information										Comments / Special Instructions								
<input type="checkbox"/> Std. 10 Business Days <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 3 Day RUSH <input type="checkbox"/> 2 Day RUSH <input type="checkbox"/> 1 Day RUSH <input type="checkbox"/> other _____		Approved By (Accutest PM): Date: _____  <input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> FULLT1 (Level 3+4) <input type="checkbox"/> NJ Reduced <input type="checkbox"/> Commercial "C" <input type="checkbox"/> NJ Data of Known Quality Protocol Reporting										<input type="checkbox"/> NYASP Category A <input type="checkbox"/> NYASP Category B <input type="checkbox"/> State Forms <input type="checkbox"/> EDD Format <input type="checkbox"/> Other _____								
Emergency & Rush T/A data available VIA LabLink		Commercial "A" = Results Only; Commercial "B" = Results + QC Summary NJ Reduced = Results + QC Summary + Partial Raw data																		
Sample Custody must be documented below each time samples change possession/including courier delivery.																				
Relinquished by Sampler: 1	Date Time: 4/21/15	Received By: 1 Ces ill d	86	Relinquished By: 2 Ces ill d	86	Date Time: 4/21/15 1800	Received By: 2													
Relinquished by Sampler: 3	Date Time:	Received By: 3		Relinquished By: 4		Date Time:	Received By: 4													
Relinquished by: 5	Date Time:	Received By: 5		Custody Seal #: 462934	✓	Inact: Not Inact: ✓	Preserved where applicable	On Ice	Cooler Temp:	32°C										

## **JB93282: Chain of Custody**

Page 1 of 3



## Accutest Laboratories Sample Receipt Summary

Accutest Job Number: JB93282

Client: \_\_\_\_\_

Project: \_\_\_\_\_

Date / Time Received: 4/24/2015 6:00:00 PM

Delivery Method: \_\_\_\_\_

Airbill #'s: \_\_\_\_\_

Cooler Temps (Initial/Adjusted): #1: (3.2/1.4); #2: (2.8/1); 0

**Cooler Security**      Y or N

- |                           |                                     |                          |                       |                                     |                          |
|---------------------------|-------------------------------------|--------------------------|-----------------------|-------------------------------------|--------------------------|
| 1. Custody Seals Present: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 3. COC Present:       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Custody Seals Intact:  | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 4. Smpl Dates/Time OK | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

**Cooler Temperature**      Y or N

- |                              |                                     |                          |
|------------------------------|-------------------------------------|--------------------------|
| 1. Temp criteria achieved:   | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Cooler temp verification: | IR Gun                              |                          |
| 3. Cooler media:             | Ice (Bag)                           |                          |
| 4. No. Coolers:              | 2                                   |                          |

**Quality Control Preservation**      Y or N      N/A

- |                                 |                                     |                          |                          |
|---------------------------------|-------------------------------------|--------------------------|--------------------------|
| 1. Trip Blank present / cooler: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Trip Blank listed on COC:    | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Samples preserved properly:  | <input checked="" type="checkbox"/> | <input type="checkbox"/> |                          |
| 4. VOCs headspace free:         | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

**Sample Integrity - Documentation**

- |  |                                     |                          |
|--|-------------------------------------|--------------------------|
| 1. Sample labels present on bottles:   | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Container labeling complete:        | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Sample container label / COC agree: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

**Sample Integrity - Condition**

- |                                  |                                     |                          |
|----------------------------------|-------------------------------------|--------------------------|
| 1. Sample recvd within HT:       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. All containers accounted for: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Condition of sample:          |                                     |                          |

Intact

**Sample Integrity - Instructions**

- |   |                                     |                                     |
|---|-------------------------------------|-------------------------------------|
| 1. Analysis requested is clear:           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 2. Bottles received for unspecified tests | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 3. Sufficient volume recvd for analysis:  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 4. Compositing instructions clear:        | <input type="checkbox"/>            | <input type="checkbox"/>            |
| 5. Filtering instructions clear:          | <input type="checkbox"/>            | <input type="checkbox"/>            |

Comments

Accutest Laboratories  
V:732.329.02002235 US Highway 130  
F: 732.329.3499Dayton, New Jersey  
www.accutest.com**JB93282: Chain of Custody****Page 2 of 3**

**Job Change Order:**

JB93282

Requested Date:	5/7/2015	Received Date:	4/24/2015
Account Name:	Cornerstone Environmental Grou	Due Date:	5/8/2015
Project Description:	E203361 Ford Ringwood, Peters Mine Road, Ringw	Deliverable:	REDT2
CSR:	mariem	TAT (Days):	14

=====

**Sample #:** JB93282-all  
**Dept:**

=====

**Change:**  
Please revise to FULT1. Also submit to ALSE.

=====

**Above Changes Per:****Date/Time:** 5/7/2015 2:51:52 PM

To Client: This Change Order is confirmation of the revisions, previously discussed with the Accutest Client Service Representative.

Page 1 of 1

5.1

**JB93282: Chain of Custody**  
**Page 3 of 3**

## Internal Sample Tracking Chronicle

Cornerstone Environmental Group, LLC

Job No: JB93282

E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ  
Project No: 140802

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JB93282-1	Collected: 24-APR-15 11:00 By: JK PMP-180-042415			Received: 24-APR-15 By: AS		
JB93282-1	SM4500NO2 B-11	24-APR-15 21:20	HS			NO2
JB93282-1	SM2540 C-11	30-APR-15	BM			TDS
JB93282-1	SW846 6010C	01-MAY-15 14:40	ND	30-APR-15 FP		CA,FE,MG,NA
JB93282-1	SM4500CO2 D-11	02-MAY-15	CB			BIC
JB93282-1	SM2320 B-11	02-MAY-15 12:45	CB			ALK
JB93282-1	SW846 8260C	04-MAY-15 10:16	TP			V8260TCL42+
JB93282-1	EPA353.2/SM4500NO2	05-MAY-15 14:06	BS			NO3O
JB93282-1	EPA 353.2/LACHAT	05-MAY-15 14:06	BS	05-MAY-15 BS		NO32
JB93282-1	EPA 300/SW846 9056A09	MAY-15 23:39	SK	09-MAY-15 SK		CHL,SO4
JB93282-2	Collected: 24-APR-15 12:30 By: JK PMP-230-042415			Received: 24-APR-15 By: AS		
JB93282-2	SM4500NO2 B-11	24-APR-15 21:20	HS			NO2
JB93282-2	SM2540 C-11	30-APR-15	BM			TDS
JB93282-2	SW846 6010C	01-MAY-15 14:46	ND	30-APR-15 FP		CA,FE,MG,NA
JB93282-2	SM4500CO2 D-11	02-MAY-15	CB			BIC
JB93282-2	SM2320 B-11	02-MAY-15 12:45	CB			ALK
JB93282-2	SW846 8260C	04-MAY-15 10:43	TP			V8260TCL42+
JB93282-2	EPA353.2/SM4500NO2	05-MAY-15 14:07	BS			NO3O
JB93282-2	EPA 353.2/LACHAT	05-MAY-15 14:07	BS	05-MAY-15 BS		NO32
JB93282-2	EPA 300/SW846 9056A10	MAY-15 00:03	SK	09-MAY-15 SK		CHL,SO4
JB93282-3	Collected: 24-APR-15 12:30 By: JK TRIP BLANK 4-23-15			Received: 24-APR-15 By: AS		
JB93282-3	SW846 8260C	04-MAY-15 09:48	TP			V8260TCL42+
JB93282-1F	Collected: 24-APR-15 11:00 By: JK PMP-180-042415			Received: 24-APR-15 By: AS		
JB93282-1F	SW846 6010C	01-MAY-15 14:52	ND	30-APR-15 FP		CA,FE,MG,NA
JB93282-2F	Collected: 24-APR-15 12:30 By: JK PMP-230-042415			Received: 24-APR-15 By: AS		
JB93282-2F	SW846 6010C	01-MAY-15 14:58	ND	30-APR-15 FP		CA,FE,MG,NA

# Accutest Internal Chain of Custody

Page 1 of 3

**Job Number:** JB93282

**Account:** CORNNYM Cornerstone Environmental Group, LLC

**Project:** E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ

**Received:** 04/24/15

5  
3

Sample/Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JB93282-1.1	Secured Storage	Alfredo Crespo	04/30/15 11:10	Retrieve from Storage
JB93282-1.1	Alfredo Crespo	Secured Staging Area	04/30/15 11:10	Return to Storage
JB93282-1.1	Secured Staging Area	Francis Pandolfo	04/30/15 12:34	Retrieve from Storage
JB93282-1.1	Francis Pandolfo	Secured Storage	05/01/15 08:20	Return to Storage
JB93282-1.1	Secured Storage	Rakesh Pathak	05/04/15 14:06	Retrieve from Storage
JB93282-1.1	Rakesh Pathak	Secured Storage	05/04/15 16:21	Return to Storage
JB93282-1.1.1	Francis Pandolfo	Metals Digestion	04/30/15 14:27	Digestate from JB93282-1.1
JB93282-1.1.1	Metals Digestion	Francis Pandolfo	04/30/15 14:29	Digestate from JB93282-1.1
JB93282-1.1.1	Francis Pandolfo	Metals Digestate Storage	04/30/15 14:29	Return to Storage
JB93282-1.1.1	Metals Digestate Storage	Nancy Duan	05/01/15 12:14	Retrieve from Storage
JB93282-1.1.1	Nancy Duan	Metals Digestate Storage	05/01/15 16:49	Return to Storage
JB93282-1.3	Secured Storage	Luis Villanueva	04/30/15 13:47	Retrieve from Storage
JB93282-1.3	Luis Villanueva	Secured Staging Area	04/30/15 13:47	Return to Storage
JB93282-1.3	Secured Staging Area	Beatrice Marcelino	04/30/15 13:50	Retrieve from Storage
JB93282-1.3	Beatrice Marcelino	Secured Storage	04/30/15 18:13	Return to Storage
JB93282-1.3	Secured Storage	Edwin Gonzalez	05/02/15 07:28	Retrieve from Storage
JB93282-1.3	Edwin Gonzalez	Secured Staging Area	05/02/15 07:28	Return to Storage
JB93282-1.3	Secured Staging Area	Chris Brunson	05/02/15 08:34	Retrieve from Storage
JB93282-1.3	Chris Brunson	Secured Storage	05/02/15 17:46	Return to Storage
JB93282-1.3	Secured Storage	Edwin Gonzalez	05/09/15 07:35	Retrieve from Storage
JB93282-1.3	Edwin Gonzalez	Secured Staging Area	05/09/15 07:35	Return to Storage
JB93282-1.3	Secured Staging Area	Stephen Krachie	05/09/15 08:15	Retrieve from Storage
JB93282-1.3	Stephen Krachie	Secured Storage	05/09/15 16:12	Return to Storage
JB93282-1.3	Secured Storage	Gage Donahue	05/11/15 09:45	Retrieve from Storage
JB93282-1.3	Gage Donahue	Secured Staging Area	05/11/15 09:45	Return to Storage
JB93282-1.3	Secured Staging Area	Hannah Coffin	05/11/15 09:58	Retrieve from Storage
JB93282-1.3	Hannah Coffin	Secured Storage	05/11/15 16:26	Return to Storage
JB93282-1.4	Secured Storage	Todd Shoemaker	05/05/15 10:53	Retrieve from Storage
JB93282-1.4	Todd Shoemaker	Brian Schneller	05/05/15 11:20	Custody Transfer
JB93282-1.4	Brian Schneller	Secured Storage	05/05/15 18:57	Return to Storage
JB93282-1.6	Secured Storage	Toan Pham	05/04/15 09:18	Retrieve from Storage
JB93282-1.6	Toan Pham	GCMS4B	05/04/15 09:18	Load on Instrument
JB93282-1.6	GCMS4B	Toan Pham	05/05/15 09:44	Unload from Instrument
JB93282-1.6	Toan Pham	Secured Storage	05/05/15 09:44	Return to Storage
JB93282-1.7	Secured Storage	Toan Pham	04/29/15 14:23	Retrieve from Storage
JB93282-1.7	Toan Pham	GCMS2C	04/29/15 14:23	Load on Instrument
JB93282-1.7	GCMS2C	Kevin Samuel	04/30/15 17:12	Unload from Instrument
JB93282-1.7	Kevin Samuel	Secured Storage	04/30/15 17:12	Return to Storage

## Accutest Internal Chain of Custody

Page 2 of 3

**Job Number:** JB93282  
**Account:** CORNNYM Cornerstone Environmental Group, LLC  
**Project:** E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ  
**Received:** 04/24/15

Sample/Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JB93282-1.9	Secured Storage	Bernadette Vassilatos	04/30/15 13:50	Retrieve from Storage
JB93282-1.9	Bernadette Vassilatos		04/30/15 13:50	Subcontract
JB93282-1.9	Bernadette Vassilatos	Secured Storage	04/30/15 13:59	Return to Storage
SUB CANCELLED				
JB93282-1F.2	Secured Storage	Alfredo Crespo	04/30/15 11:10	Retrieve from Storage
JB93282-1F.2	Alfredo Crespo	Secured Staging Area	04/30/15 11:10	Return to Storage
JB93282-1F.2	Secured Staging Area	Francis Pandolfo	04/30/15 12:34	Retrieve from Storage
JB93282-1F.2	Francis Pandolfo	Secured Storage	05/01/15 08:20	Return to Storage
JB93282-1F.2	Secured Storage	Rakesh Pathak	05/04/15 14:06	Retrieve from Storage
JB93282-1F.2	Rakesh Pathak	Secured Storage	05/04/15 16:21	Return to Storage
JB93282-1F.2.1	Francis Pandolfo	Metals Digestion	04/30/15 14:27	Digestate from JB93282-1F.2
JB93282-1F.2.1	Metals Digestion	Francis Pandolfo	04/30/15 14:29	Digestate from JB93282-1F.2
JB93282-1F.2.1	Francis Pandolfo	Metals Digestate Storage	04/30/15 14:29	Return to Storage
JB93282-1F.2.1	Metals Digestate Storage	Nancy Duan	05/01/15 12:14	Retrieve from Storage
JB93282-1F.2.1	Nancy Duan	Metals Digestate Storage	05/01/15 16:49	Return to Storage
JB93282-2.1	Secured Storage	Alfredo Crespo	04/30/15 11:10	Retrieve from Storage
JB93282-2.1	Alfredo Crespo	Secured Staging Area	04/30/15 11:10	Return to Storage
JB93282-2.1	Secured Staging Area	Francis Pandolfo	04/30/15 12:34	Retrieve from Storage
JB93282-2.1	Francis Pandolfo	Secured Storage	05/01/15 08:20	Return to Storage
JB93282-2.1.1	Francis Pandolfo	Metals Digestion	04/30/15 14:27	Digestate from JB93282-2.1
JB93282-2.1.1	Metals Digestion	Francis Pandolfo	04/30/15 14:29	Digestate from JB93282-2.1
JB93282-2.1.1	Francis Pandolfo	Metals Digestate Storage	04/30/15 14:29	Return to Storage
JB93282-2.1.1	Metals Digestate Storage	Nancy Duan	05/01/15 12:14	Retrieve from Storage
JB93282-2.1.1	Nancy Duan	Metals Digestate Storage	05/01/15 16:49	Return to Storage
JB93282-2.3	Secured Storage	Luis Villanueva	04/30/15 13:47	Retrieve from Storage
JB93282-2.3	Luis Villanueva	Secured Staging Area	04/30/15 13:47	Return to Storage
JB93282-2.3	Secured Staging Area	Beatrice Marcelino	04/30/15 13:50	Retrieve from Storage
JB93282-2.3	Beatrice Marcelino	Secured Storage	04/30/15 18:13	Return to Storage
JB93282-2.3	Secured Storage	Edwin Gonzalez	05/02/15 07:28	Retrieve from Storage
JB93282-2.3	Edwin Gonzalez	Secured Staging Area	05/02/15 07:28	Return to Storage
JB93282-2.3	Secured Staging Area	Chris Brunson	05/02/15 08:34	Retrieve from Storage
JB93282-2.3	Chris Brunson	Secured Storage	05/02/15 17:46	Return to Storage
JB93282-2.3	Secured Storage	Edwin Gonzalez	05/09/15 07:35	Retrieve from Storage
JB93282-2.3	Edwin Gonzalez	Secured Staging Area	05/09/15 07:35	Return to Storage
JB93282-2.3	Secured Staging Area	Stephen Krachie	05/09/15 08:15	Retrieve from Storage
JB93282-2.3	Stephen Krachie	Secured Storage	05/09/15 16:12	Return to Storage
JB93282-2.3	Secured Storage	Gage Donahue	05/11/15 09:45	Retrieve from Storage
JB93282-2.3	Gage Donahue	Secured Staging Area	05/11/15 09:45	Return to Storage
JB93282-2.3	Secured Staging Area	Hannah Coffin	05/11/15 09:58	Retrieve from Storage

## Accutest Internal Chain of Custody

Page 3 of 3

**Job Number:** JB93282  
**Account:** CORNNYM Cornerstone Environmental Group, LLC  
**Project:** E203361 Ford Ringwood, Peters Mine Road, Ringwood, NJ  
**Received:** 04/24/15

Sample/Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JB93282-2.3	Hannah Coffin	Secured Storage	05/11/15 16:26	Return to Storage
JB93282-2.4	Secured Storage	Todd Shoemaker	05/05/15 10:53	Retrieve from Storage
JB93282-2.4	Todd Shoemaker	Brian Schneller	05/05/15 11:20	Custody Transfer
JB93282-2.4	Brian Schneller	Secured Storage	05/05/15 18:57	Return to Storage
JB93282-2.6	Secured Storage	Toan Pham	05/04/15 09:18	Retrieve from Storage
JB93282-2.6	Toan Pham	GCMS4B	05/04/15 09:18	Load on Instrument
JB93282-2.6	GCMS4B	Toan Pham	05/05/15 09:44	Unload from Instrument
JB93282-2.6	Toan Pham	Secured Storage	05/05/15 09:44	Return to Storage
JB93282-2.7	Secured Storage	Toan Pham	04/29/15 14:23	Retrieve from Storage
JB93282-2.7	Toan Pham	GCMS2C	04/29/15 14:23	Load on Instrument
JB93282-2.7	GCMS2C	Kevin Samuel	04/30/15 17:12	Unload from Instrument
JB93282-2.7	Kevin Samuel	Secured Storage	04/30/15 17:12	Return to Storage
JB93282-2.9	Secured Storage	Bernadette Vassilatos	04/30/15 13:50	Retrieve from Storage
JB93282-2.9	Bernadette Vassilatos		04/30/15 13:50	Subcontract
JB93282-2.9	Bernadette Vassilatos	Secured Storage	04/30/15 13:59	Return to Storage
SUB CANCELLED				
JB93282-2F.2	Secured Storage	Alfredo Crespo	04/30/15 11:10	Retrieve from Storage
JB93282-2F.2	Alfredo Crespo	Secured Staging Area	04/30/15 11:10	Return to Storage
JB93282-2F.2	Secured Staging Area	Francis Pandolfo	04/30/15 12:34	Retrieve from Storage
JB93282-2F.2	Francis Pandolfo	Secured Storage	05/01/15 08:20	Return to Storage
JB93282-2F.2.1	Francis Pandolfo	Metals Digestion	04/30/15 14:27	Digestate from JB93282-2F.2
JB93282-2F.2.1	Metals Digestion	Francis Pandolfo	04/30/15 14:29	Digestate from JB93282-2F.2
JB93282-2F.2.1	Francis Pandolfo	Metals Digestate Storage	04/30/15 14:29	Return to Storage
JB93282-2F.2.1	Metals Digestate Storage	Nancy Duan	05/01/15 12:14	Retrieve from Storage
JB93282-2F.2.1	Nancy Duan	Metals Digestate Storage	05/01/15 16:49	Return to Storage
JB93282-3.1	Secured Storage	Toan Pham	05/04/15 09:18	Retrieve from Storage
JB93282-3.1	Toan Pham	GCMS4B	05/04/15 09:18	Load on Instrument
JB93282-3.1	GCMS4B	Toan Pham	05/05/15 09:44	Unload from Instrument
JB93282-3.1	Toan Pham	Secured Storage	05/05/15 09:44	Return to Storage
JB93282-3.2	Secured Storage	Toan Pham	04/29/15 14:23	Retrieve from Storage
JB93282-3.2	Toan Pham	GCMS2C	04/29/15 14:23	Load on Instrument
JB93282-3.2	GCMS2C	Kevin Samuel	04/30/15 17:12	Unload from Instrument
JB93282-3.2	Kevin Samuel	Secured Storage	04/30/15 17:12	Return to Storage

May 12, 2015

Tim Roeper  
Cornerstone EG  
100 Crystal Run Road  
Suite 101  
Middletown, NY 10941

CADENA project ID: E203361  
Project: Ford Ringwood Mines Project  
Project number:  
Laboratory: Accutest Laboratories - Dayton (Chloride and Sulfate analysis performed at Accutest-Orlando lab)  
Laboratory submittal: JB92815  
Sample date: 2015-04-20  
Report received by CADENA: 2015-05-08  
Initial Data Verification completed by CADENA: 2015-05-12

Data verification for the report specified above was completed using the Ford Motor Company Environmental Laboratory Technical Specification, the CADENA Standard Operating Procedure for the Verification of Environmental Analytical Data and the associated analytical methods as references for evaluating the batch QC, sample data and report content. The EPA National Functional Guidelines for validating organic and inorganic data were used as guidance when addressing out of control QC results and the associated data qualifiers.

2 Water sample(s) were analyzed for GCMS VOC, Metals and General Chemistry parameter(s). 1 Trip blank and 1 field blank were analyzed for GCMS VOC parameters.

Sample/MS/MSD Surrogate Recovery, LCS/LCD Recovery, Blank Contamination and Hold Time Exception were reviewed as part of our verification.

Analytical results reported between RDL and MDL are flagged 'J' and considered estimated values.

Qualifiers added during verification have been added to the electronic data which is available for download from the CADENA CLMS. Refer to the attached table of analytical results that have been qualified during verification.

The following minor QC exceptions or missing information were noted:

GCMS VOC client sample detections for Tentatively Identified Compounds (TIC's) should be considered to be estimated and qualified with NJ flags.

GCMS VOC trip blank and field blank were non-detect for all target analytes.

Metals method blank had detections below the RL for calcium and iron. Qualification of client sample results was not required based on these method blank detections.

TDS method blank had a detection below the RL. Qualification of client sample results was not required based on this method blank detection.

The definitions of the qualifiers used for this data package are defined in the analytical report. CADENA valid qualifiers are defined in the table below. To view and download a PDF copy of the laboratory analytical report access the CADENA CLMS at <http://clms.cadenaco.com/index.cfm>.

Please contact me if you have any questions.

Sincerely,

Jim Tomalia, Project Scientist

## CADENA Valid Qualifiers

Valid Qualifiers	Description
<	Less than the reported concentration.
>	Greater than the reported concentration.
B	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was greater than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the reported concentration. For Inorganic methods the sample concentration was greater than the RDL and less than 10x the blank concentration and is considered non-detect at the reported concentration.
E	The analyte / Compound reported exceeds the calibration range and is considered estimated.
EMPC	Estimated Minimum Potential Contamination - Dioxin/Furan analyses only.
J	Indicates an estimated value. This flag is used either when estimating a concentration for a tentatively identified compound or when the data indicates the presence of an analyte / compound but the result is less than the sample Quantitation limit, but greater than zero. The flag is also used in data validation to indicate a reported value should be considered estimated due to associated quality assurance deficiencies.
J-	The result is an estimated quantity, but the result may be biased low.
JH	The sample result is considered estimated and is potentially biased high.
JL	The sample result is considered estimated and is potentially biased low.
NJ	Tentatively identified compound with approximated concentration.
R	Indicates the value is considered to be unusable. (Note: The analyte / compound may or may not be present.)
TNTC	Too Numerous to Count - Asbestos and Microbiological Results.
U	Indicates that the analyte / compound was analyzed for, but not detected.
UB	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was less than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the RDL. For Inorganic methods the sample concentration was less than the RDL and less than 10x the blank concentration and is considered non-detect at the RDL.
UJ	The analyte / compound was not detected above the reported sample Quantitation limit. However, the Quantitation limit is considered to be approximate due to associated quality assurance results and may or may not represent the actual limit of Quantitation to accurately and precisely report the analyte in the sample.

## SAMPLING AND ANALYSIS SUMMARY

CADENA Project ID: E203361

Laboratory: Accutest Laboratories-Dayton

Laboratory Submittal: JB92815

Lab Sample ID	Sample ID	Collection Date (mm/yy/dd)	Collection Time (hh:mm:ss)	GCMS VOC Volatile	Metals by ICP Spectroscopy(D)	Metals by ICP Spectroscopy	Alkalinity in Water	Solids in Water, Dissolved	Carbon Dioxide and Forms of Alkalinity by Calculation	Nitrite in Water - Colorimetric	Nitrate-Nitrite - Cd Reduction	Inorganic Anions by IC
JB92815-1	TB-042015	4/20/2015	5:20:00	X								
JB92815-2	OB-21-042015	4/20/2015	11:50:00	X		X	X	X	X	X	X	X
JB92815-2F	OB-21-042015	4/20/2015	11:50:00		X							
JB92815-3	RW-7-042015	4/20/2015	2:50:00	X		X	X	X	X	X	X	X
JB92815-3F	RW-7-042015	4/20/2015	2:50:00		X							
JB92815-4	FB042015	4/20/2015	5:20:00	X		X	X	X	X	X	X	X
JB92815-4F	FB042015	4/20/2015	5:20:00		X							

## Qualified Results Summary

CADENA Project ID: E203361

Laboratory: Accutest Laboratories - Dayton

Laboratory Submittal: JB92815

Analyte	Sample Name: TB-042015				OB-21-042015				RW-7-042015				FB042015					
	Lab Sample ID: JB92815-1				JB92815-2				JB92815-3				JB92815-4					
	Sample Date: 4/20/2015				4/20/2015				4/20/2015				4/20/2015					
	Cas No.	Report Result	Valid Limit	Report Units	Valid Qualifier													
<b>GC/MS VOC</b>																		
<u>OSW-8260C</u>																		
Isopropanol - TIC	67-63-0									23	0	ug/l	NJ		0	0	ug/l	NJ
Total Alkanes - TIC	TIC1																	
Total Alkanes - TIC	TIC20	0	0	ug/l	NJ	0	0	ug/l	NJ	0	0	ug/l	NJ		0	0	ug/l	NJ
Volatile organic compounds - TIC	E-12419	0	0	ug/l	NJ	0	0	ug/l	NJ	23	0	ug/l	NJ		0	0	ug/l	NJ

## Analytical Results Summary

CADENA Project ID: E203361  
 Laboratory: Accutest Laboratories - Dayton  
 Laboratory Submittal: JB92815

Analyte	Cas No.	TB-042015				OB-21-042015				OB-21-042015				RW-7-042015				
		Report		Valid	Report	Report		Valid	Report	Report		Valid	Report	Report		Valid		
		Result	Limit	Units	Qualifier	Result	Limit	Units	Qualifier	Result	Limit	Units	Qualifier	Result	Limit	Units	Qualifier	
<b>GC/MS VOC</b>																		
<u>OSW-8260C</u>																		
1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---					ND	1.0	ug/l	---	
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---					ND	1.0	ug/l	---	
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	5.0	ug/l	---	ND	5.0	ug/l	---					ND	5.0	ug/l	---	
1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---					ND	1.0	ug/l	---	
1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---					ND	1.0	ug/l	---	
1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---					ND	1.0	ug/l	---	
1,2-Dibromo-3-chloropropane	96-12-8	ND	2.0	ug/l	---	ND	2.0	ug/l	---					ND	2.0	ug/l	---	
1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---					ND	1.0	ug/l	---	
1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---					ND	1.0	ug/l	---	
1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---					ND	1.0	ug/l	---	
1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---					ND	1.0	ug/l	---	
1,2-Dibromoethane	106-93-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---					ND	1.0	ug/l	---	
2-Hexanone	591-78-6	ND	5.0	ug/l	---	ND	5.0	ug/l	---					ND	5.0	ug/l	---	
Acetone	67-64-1	ND	10	ug/l	---	ND	10	ug/l	---					8.1	10	ug/l	J	
Benzene	71-43-2	ND	0.50	ug/l	---	ND	0.50	ug/l	---					ND	0.50	ug/l	---	
Bromoform	75-25-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---					ND	1.0	ug/l	---	
Carbon disulfide	75-15-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---					ND	2.0	ug/l	---	
Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---					ND	1.0	ug/l	---	
Chlorobenzene	108-90-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---					ND	1.0	ug/l	---	
Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---					ND	1.0	ug/l	---	
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---					ND	1.0	ug/l	---	
cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---					ND	1.0	ug/l	---	
Cumene	98-82-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---					ND	1.0	ug/l	---	
Cyclohexane	110-82-7	ND	5.0	ug/l	---	ND	5.0	ug/l	---					ND	5.0	ug/l	---	
Dibromochloromethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---					ND	1.0	ug/l	---	
Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---					ND	1.0	ug/l	---	
Dichlorodifluoromethane	75-71-8	ND	2.0	ug/l	---	ND	2.0	ug/l	---					ND	2.0	ug/l	---	
Ethyl chloride	75-00-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---					ND	1.0	ug/l	---	
Ethylbenzene	100-41-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---					ND	1.0	ug/l	---	
Isopropanol - TIC	67-63-0													23	0	ug/l	NJ	
Methyl acetate	79-20-9	ND	5.0	ug/l	---	ND	5.0	ug/l	---					ND	5.0	ug/l	---	
Methyl bromide	74-83-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---					ND	2.0	ug/l	---	
Methyl chloride	74-87-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---					ND	1.0	ug/l	---	
Methyl cyclohexane	108-87-2	ND	5.0	ug/l	---	ND	5.0	ug/l	---					ND	5.0	ug/l	---	
Methyl ethyl ketone	78-93-3	ND	10	ug/l	---	ND	10	ug/l	---					ND	10	ug/l	---	
Methyl isobutyl ketone	108-10-1	ND	5.0	ug/l	---	ND	5.0	ug/l	---					ND	5.0	ug/l	---	
Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---					ND	1.0	ug/l	---	
Methylene chloride	75-09-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---					ND	2.0	ug/l	---	
o-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---					ND	1.0	ug/l	---	
Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---					ND	1.0	ug/l	---	
Tetrachloroethene	127-18-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---					ND	1.0	ug/l	---	
Toluene	108-88-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---					ND	1.0	ug/l	---	
Total Alkanes - TIC	TIC1													0	0	ug/l	NJ	
Total Alkanes - TIC	TIC20	0	0	ug/l	NJ	0	0	ug/l	NJ					0	0	ug/l	NJ	
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---					ND	1.0	ug/l	---	
trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---					ND	1.0	ug/l	---	
Trichloroethylene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---					ND	1.0	ug/l	---	
Trichlorofluoromethane	75-69-4	ND	2.0	ug/l	---	ND	2.0	ug/l	---					ND	2.0	ug/l	---	
Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---					ND	1.0	ug/l	---	
Vinylidene chloride	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---					ND	1.0	ug/l	---	
Volatile organic compounds - TIC	E-12419	0	0	ug/l	NJ	0	0	ug/l	NJ					23	0	ug/l	NJ	
Xylene, total	1330-20-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---					ND	1.0	ug/l	---	

## Analytical Results Summary

CADENA Project ID: E203361  
 Laboratory: Accutest Laboratories - Dayton  
 Laboratory Submittal: JB92815

Metals	Analyte	Cas No.	Sample Name: TB-042015			OB-21-042015			OB-21-042015			RW-7-042015			
			Lab Sample ID: JB92815-1			JB92815-2			JB92815-2F			JB92815-3			
			Sample Date: 4/20/2015			4/20/2015			4/20/2015			4/20/2015			
			Report	Valid	Report	Report	Valid	Report	Report	Valid	Report	Report	Valid	Report	
			Result	Limit	Units	Qualifier	Result	Limit	Units	Qualifier	Result	Limit	Units	Qualifier	
<u>OSW-6010C</u>		Calcium	7440-70-2				11400	5000	ug/l	---	11700	5000	ug/l	---	
Calcium - Dissolved		7440-70-2					1740	100	ug/l	---	ND	100	ug/l	---	
Iron		7439-89-6									522	100	ug/l	---	
Iron - Dissolved		7439-89-6									ND	5000	ug/l	---	
Magnesium		7439-95-4					5250	5000	ug/l	---	5170	5000	ug/l	---	
Magnesium - Dissolved		7439-95-4									ND	10000	ug/l	---	
Sodium		7440-23-5					ND	10000	ug/l	---	ND	10000	ug/l	---	
Sodium - Dissolved		7440-23-5									ND	10000	ug/l	---	
<b>General Chemistry</b>															
<u>APHA-2320</u>		Calcium carbonate	471-34-1				36.8	5.0	mg/l	---		39.2	5.0	mg/l	---
<u>APHA-2540C</u>		Total dissolved solids	E-10173				40.0	10	mg/l	---		47.0	10	mg/l	---
<u>APHA-4500-CO2-D</u>		Alkalinity, Bicarbonate	E-14508				36.7	5.0	mg/l	---		39.2	5.0	mg/l	---
<u>APHA-4500-NO2-B</u>		Nitrate	14797-55-8				ND	0.11	mg/l	---		ND	0.11	mg/l	---
Nitrite		14797-65-0					ND	0.010	mg/l	---		ND	0.010	mg/l	---
<u>EMSLC-353.2</u>		nitrate/nitrite	E-10128				0.10	0.10	mg/l	---		ND	0.10	mg/l	---
<u>OSW-9056A</u>		Chloride	16887-00-6				ND	2.0	mg/l	---		ND	2.0	mg/l	---
Sulfate		14808-79-8					7.6	2.0	mg/l	---		9.3	2.0	mg/l	---

## Analytical Results Summary

CADENA Project ID: E203361  
 Laboratory: Accutest Laboratories - Dayton  
 Laboratory Submittal: JB92815

Analyte	Sample Name:	RW-7-042015	FB042015			FB042015			
		Lab Sample ID:	JB92815-3F			JB92815-4F			
			4/20/2015			4/20/2015			
			Report	Valid	Report	Valid	Report	Valid	Report
		Cas No.	Result	Limit	Units	Qualifier	Result	Limit	Units
GC/MS VOC	OSW-8260C								
1,1,1-Trichloroethane		71-55-6				ND	1.0	ug/l	---
1,1,2,2-Tetrachloroethane		79-34-5				ND	1.0	ug/l	---
1,1,2-Trichloro-1,2,2-trifluoroethane		76-13-1				ND	5.0	ug/l	---
1,1,2-Trichloroethane		79-00-5				ND	1.0	ug/l	---
1,1-Dichloroethane		75-34-3				ND	1.0	ug/l	---
1,2,4-Trichlorobenzene		120-82-1				ND	1.0	ug/l	---
1,2-Dibromo-3-chloropropane		96-12-8				ND	2.0	ug/l	---
1,2-Dichloroethane		107-06-2				ND	1.0	ug/l	---
1,2-Dichloropropane		78-87-5				ND	1.0	ug/l	---
1,3-Dichlorobenzene		541-73-1				ND	1.0	ug/l	---
1,4-Dichlorobenzene		106-46-7				ND	1.0	ug/l	---
1,2-Dibromoethane		106-93-4				ND	1.0	ug/l	---
2-Hexanone		591-78-6				ND	5.0	ug/l	---
Acetone		67-64-1				ND	10	ug/l	---
Benzene		71-43-2				ND	0.50	ug/l	---
Bromoform		75-25-2				ND	1.0	ug/l	---
Carbon disulfide		75-15-0				ND	2.0	ug/l	---
Carbon tetrachloride		56-23-5				ND	1.0	ug/l	---
Chlorobenzene		108-90-7				ND	1.0	ug/l	---
Chloroform		67-66-3				ND	1.0	ug/l	---
cis-1,2-Dichloroethene		156-59-2				ND	1.0	ug/l	---
cis-1,3-Dichloropropene		10061-01-5				ND	1.0	ug/l	---
Cumene		98-82-8				ND	1.0	ug/l	---
Cyclohexane		110-82-7				ND	5.0	ug/l	---
Dibromochloromethane		124-48-1				ND	1.0	ug/l	---
Dichlorobromomethane		75-27-4				ND	1.0	ug/l	---
Dichlorodifluoromethane		75-71-8				ND	2.0	ug/l	---
Ethyl chloride		75-00-3				ND	1.0	ug/l	---
Ethylbenzene		100-41-4				ND	1.0	ug/l	---
Isopropanol - TIC		67-63-0							
Methyl acetate		79-20-9				ND	5.0	ug/l	---
Methyl bromide		74-83-9				ND	2.0	ug/l	---
Methyl chloride		74-87-3				ND	1.0	ug/l	---
Methyl cyclohexane		108-87-2				ND	5.0	ug/l	---
Methyl ethyl ketone		78-93-3				ND	10	ug/l	---
Methyl isobutyl ketone		108-10-1				ND	5.0	ug/l	---
Methyl tert-butyl ether		1634-04-4				ND	1.0	ug/l	---
Methylene chloride		75-09-2				ND	2.0	ug/l	---
o-Dichlorobenzene		95-50-1				ND	1.0	ug/l	---
Styrene		100-42-5				ND	1.0	ug/l	---
Tetrachloroethene		127-18-4				ND	1.0	ug/l	---
Toluene		108-88-3				ND	1.0	ug/l	---
Total Alkanes - TIC		TIC1				0	0	ug/l	NJ
Total Alkanes - TIC		TIC20							
trans-1,2-Dichloroethene		156-60-5				ND	1.0	ug/l	---
trans-1,3-Dichloropropene		10061-02-6				ND	1.0	ug/l	---
Trichloroethylene		79-01-6				ND	1.0	ug/l	---
Trichlorofluoromethane		75-69-4				ND	2.0	ug/l	---
Vinyl chloride		75-01-4				ND	1.0	ug/l	---
Vinylidene chloride		75-35-4				ND	1.0	ug/l	---
Volatile organic compounds - TIC		E-12419				0	0	ug/l	NJ
Xylene, total		1330-20-7				ND	1.0	ug/l	---

## Analytical Results Summary

CADENA Project ID: E203361  
 Laboratory: Accutest Laboratories - Dayton  
 Laboratory Submittal: JB92815

Metals	Analyte	Cas No.	Sample Name: RW-7-042015				FB042015				FB042015							
			Lab Sample ID: JB92815-3F		JB92815-4		JB92815-4F											
			Sample Date: 4/20/2015		4/20/2015		4/20/2015											
			Report	Valid	Report	Valid	Report	Valid	Report	Valid	Report	Valid	Report	Valid				
			Result	Limit	Units	Qualifier	Result	Limit	Units	Qualifier	Result	Limit	Units	Qualifier				
	<u>OSW-6010C</u>																	
	Calcium	7440-70-2					ND	5000	ug/l	---								
	Calcium - Dissolved	7440-70-2	11700	5000	ug/l	---		ND	100	ug/l	---	ND	5000	ug/l				
	Iron	7439-89-6					ND	100	ug/l	---								
	Iron - Dissolved	7439-89-6	ND	100	ug/l	---		ND	5000	ug/l	---	ND	100	ug/l				
	Magnesium	7439-95-4					ND	5000	ug/l	---								
	Magnesium - Dissolved	7439-95-4	ND	5000	ug/l	---		ND	5000	ug/l	---	ND	5000	ug/l				
	Sodium	7440-23-5					ND	10000	ug/l	---								
	Sodium - Dissolved	7440-23-5	ND	10000	ug/l	---		ND	10000	ug/l	---	ND	10000	ug/l				
	<b>General Chemistry</b>																	
	<u>APHA-2320</u>																	
	Calcium carbonate	471-34-1					ND	5.0	mg/l	---								
	<u>APHA-2540C</u>																	
	Total dissolved solids	E-10173					ND	10	mg/l	---								
	<u>APHA-4500-CO2-D</u>																	
	Alkalinity, Bicarbonate	E-14508					ND	5.0	mg/l	---								
	<u>APHA-4500-NO2-B</u>																	
	Nitrate	14797-55-8					ND	0.11	mg/l	---								
	Nitrite	14797-65-0					ND	0.010	mg/l	---								
	<u>EMSLC-353.2</u>																	
	nitrate/nitrite	E-10128					ND	0.10	mg/l	---								
	<u>OSW-9056A</u>																	
	Chloride	16887-00-6					ND	2.0	mg/l	---								
	Sulfate	14808-79-8					ND	2.0	mg/l	---								



May 12, 2015

Tim Roeper  
Cornerstone EG  
100 Crystal Run Road  
Suite 101  
Middletown, NY 10941

CADENA project ID: E203361  
Project: Ford Ringwood Mines Project  
Project number:  
Laboratory: Accutest Laboratories - Dayton (Sulfate and chloride analysis performed at Accutest-Dayton lab)  
Laboratory submittal: JB92906  
Sample date: 2015-04-21  
Report received by CADENA: 2015-05-08  
Initial Data Verification completed by CADENA: 2015-05-12

Data verification for the report specified above was completed using the Ford Motor Company Environmental Laboratory Technical Specification, the CADENA Standard Operating Procedure for the Verification of Environmental Analytical Data and the associated analytical methods as references for evaluating the batch QC, sample data and report content. The EPA National Functional Guidelines for validating organic and inorganic data were used as guidance when addressing out of control QC results and the associated data qualifiers.

3 Water sample(s) were analyzed for GCMS VOC, Metals and General Chemistry parameter(s). 1 Trip blank was analyzed for GCMS VOC parameters.

Sample/MS/MSD Surrogate Recovery, LCS/LCD Recovery, MS/MSD Recovery, MS/MSD RPD, Blank Contamination and Hold Time Exception were reviewed as part of our verification.

Analytical results reported between RDL and MDL are flagged 'J' and considered estimated values.

Qualifiers added during verification have been added to the electronic data which is available for download from the CADENA CLMS. Refer to the attached table of analytical results that have been qualified during verification.

The following minor QC exceptions or missing information were noted:

GCMS VOC sample -003 recoveries were outliers biased high for multiple analytes. LCS/LCSduplicate RPD's were also outliers for multiple analytes. Client sample -003 results for cyclohexane should be considered to be estimated and qualified with a J flag. The remaining associated analytes were non-detect so were not qualified based on the MS recovery high bias outliers.

GCMS VOC client sample detections for Tentatively Identified Compounds (TIC's) should be considered to be estimated and qualified with NJ flags.

GCMS VOC trip blank was non-detect for all target analytes.

Metals QC batch MS recovery outliers were not determined using samples from this submittal so qualification of client sample results was not required based on these sample-specific QC outliers.

Metals method blank had detections below the RL for calcium. Qualification of client sample results was not required based on these method blank detections.

The definitions of the qualifiers used for this data package are defined in the analytical report. CADENA valid qualifiers are defined in the table below. To view and download a PDF copy of the laboratory analytical report access the CADENA CLMS at <http://clms.cadenaco.com/index.cfm>.

Please contact me if you have any questions.

Sincerely,

Jim Tomalia

Project Scientist

## CADENA Valid Qualifiers

Valid Qualifiers	Description
<	Less than the reported concentration.
>	Greater than the reported concentration.
B	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was greater than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the reported concentration. For Inorganic methods the sample concentration was greater than the RDL and less than 10x the blank concentration and is considered non-detect at the reported concentration.
E	The analyte / Compound reported exceeds the calibration range and is considered estimated.
EMPC	Estimated Minimum Potential Contamination - Dioxin/Furan analyses only.
J	Indicates an estimated value. This flag is used either when estimating a concentration for a tentatively identified compound or when the data indicates the presence of an analyte / compound but the result is less than the sample Quantitation limit, but greater than zero. The flag is also used in data validation to indicate a reported value should be considered estimated due to associated quality assurance deficiencies.
J-	The result is an estimated quantity, but the result may be biased low.
JH	The sample result is considered estimated and is potentially biased high.
JL	The sample result is considered estimated and is potentially biased low.
NJ	Tentatively identified compound with approximated concentration.
R	Indicates the value is considered to be unusable. (Note: The analyte / compound may or may not be present.)
TNTC	Too Numerous to Count - Asbestos and Microbiological Results.
U	Indicates that the analyte / compound was analyzed for, but not detected.
UB	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was less than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the RDL. For Inorganic methods the sample concentration was less than the RDL and less than 10x the blank concentration and is considered non-detect at the RDL.
UJ	The analyte / compound was not detected above the reported sample Quantitation limit. However, the Quantitation limit is considered to be approximate due to associated quality assurance results and may or may not represent the actual limit of Quantitation to accurately and precisely report the analyte in the sample.

## SAMPLING AND ANALYSIS SUMMARY

CADENA Project ID: E203361

Laboratory: Accutest Laboratories-Dayton

Laboratory Submittal: JB92906

Lab Sample ID	Sample ID	Collection Date (mm/yy/dd)	Collection Time (hh:mm:ss)	GCMS VOC Volatile	Metals by ICP Spectroscopy(D)	Metals by ICP Spectroscopy	Alkalinity in Water	Solids in Water, Dissolved	Carbon Dioxide and Forms of Alkalinity by Calculation	Nitrite in Water - Colorimetric	Nitrate-Nitrite - Cd Reduction	Inorganic Anions by IC
JB92906-1	OB-20A-042115	4/21/2015	9:25:00	X		X	X	X	X	X	X	X
JB92906-1F	OB-20A-042115	4/21/2015	9:25:00		X							
JB92906-2	TB-042115	4/21/2015	3:35:00	X								
JB92906-3	OB-20B-042115	4/21/2015	1:15:00	X		X	X	X	X	X	X	X
JB92906-3F	OB-20B-042115	4/21/2015	1:15:00		X							
JB92906-4	OB-27-042115	4/21/2015	3:35:00	X		X	X	X	X	X	X	X
JB92906-4F	OB-27-042115	4/21/2015	3:35:00		X							

## Qualified Results Summary

CADENA Project ID: E203361

Laboratory: Accutest Laboratories - Dayton

Laboratory Submittal: JB92906

Analyte	Cas No.	Sample Name: OB-20A-042115				TB-042115				OB-20B-042115				OB-27-042115					
		Lab Sample ID: JB92906-1		JB92906-2		JB92906-3		JB92906-4											
		Sample Date: 4/21/2015		4/21/2015		4/21/2015		4/21/2015		4/21/2015		4/21/2015		4/21/2015		4/21/2015			
		Report	Valid	Report	Valid	Report	Valid	Report	Valid	Report	Valid	Report	Valid	Report	Valid	Report	Valid		
<b>GC/MS VOC</b>																			
<u>OSW-8260C</u>																			
1H-indene-dihydro-dimethyl- isomer - TIC	TIC11															9.0	0	ug/l	NJ
1H-indene-dihydro-dimethyl- isomer - TIC	TIC12															18	0	ug/l	NJ
1H-indene-dihydro-dimethyl- isomer - TIC	TIC13															10	0	ug/l	NJ
1H-indene-dihydro-dimethyl- isomer - TIC	TIC7															17	0	ug/l	NJ
1H-indene-dihydro-dimethyl- isomer - TIC	TIC8															17	0	ug/l	NJ
1H-Indene-dihydro-methyl- isomer - TIC	TIC3															5.5	0	ug/l	NJ
1H-Indene-dihydro-methyl- isomer - TIC	TIC6															19	0	ug/l	NJ
1H-Indene-dihydro-trimethyl- isomer - TIC	TIC14															8.3	0	ug/l	NJ
1H-Indene-dihydro-trimethyl- isomer - TIC	TIC15															12	0	ug/l	NJ
2,3-Dihydro-1H-indene - TIC	496-11-7															12	0	ug/l	NJ
C4 alkyl benzene - TIC	TIC3															10	0	ug/l	NJ
C4 alkyl benzene - TIC	TIC4															15	0	ug/l	NJ
C4 alkyl benzene - TIC	TIC5															17	0	ug/l	NJ
C5 alkyl benzene - TIC	TIC4															5.5	0	ug/l	NJ
Cyclohexane	110-82-7															0.86	5.0	ug/l	J
Naphthalene - TIC	91-20-3															22	0	ug/l	NJ
Naphthalene, methyl- isomer - TIC	TIC16															18	0	ug/l	NJ
system artifact - TIC	TIC1	100	0	ug/l	NJ	94	0	ug/l	NJ	97	0	ug/l	NJ	100	0	ug/l	NJ		
Total Alkanes - TIC	TIC20	0	0	ug/l	NJ	0	0	ug/l	NJ	0	0	ug/l	NJ	0	0	ug/l	NJ		
unknown - TIC	TIC10															9.6	0	ug/l	NJ
Volatile organic compounds - TIC	E-12419	0	0	ug/l	NJ	0	0	ug/l	NJ	16.6	0	ug/l	NJ	213.9	0	ug/l	NJ		

# Analytical Results Summary

CADENA Project ID: E203361  
 Laboratory: Accutest Laboratories - Dayton  
 Laboratory Submittal: JB92906

Analyte	Cas No.	Sample Name: OB-20A-042115			OB-20A-042115			TB-042115			OB-20B-042115			
		Report Result	Valid Limit	Units Qualifier	Report Result	Valid Limit	Units Qualifier	Report Result	Valid Limit	Units Qualifier	Report Result	Valid Limit	Units Qualifier	
<b>GC/MS VOC</b>														
<u>OSW-8260C</u>														
1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---	
1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	
1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	
1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	
1,2-Dibromo-3-chloropropane	96-12-8	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---	
1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	
1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	
1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	
1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	
1,2-Dibromoethane	106-93-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	
1H-indene-dihydro-dimethyl- isomer - TIC	TIC11													
1H-indene-dihydro-dimethyl- isomer - TIC	TIC12													
1H-indene-dihydro-dimethyl- isomer - TIC	TIC13													
1H-indene-dihydro-dimethyl- isomer - TIC	TIC7													
1H-indene-dihydro-dimethyl- isomer - TIC	TIC8													
1H-Indene-dihydro-methyl- isomer - TIC	TIC3										5.5	0	ug/l	
1H-Indene-dihydro-methyl- isomer - TIC	TIC6												NJ	
1H-Indene-dihydro-trimethyl- isomer - TIC	TIC14													
1H-Indene-dihydro-trimethyl- isomer - TIC	TIC15											5.6	0	ug/l
2,3-Dihydro-1H-indene - TIC	496-11-7												NJ	
2-Hexanone	591-78-6	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---	
Acetone	67-64-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---	
Benzene	71-43-2	ND	0.50	ug/l	---	ND	0.50	ug/l	---	0.36	0.50	ug/l	J	
Bromoform	75-25-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	
C4 alkyl benzene - TIC	TIC3													
C4 alkyl benzene - TIC	TIC4													
C4 alkyl benzene - TIC	TIC5													
C5 alkyl benzene - TIC	TIC4													
Carbon disulfide	75-15-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---	
Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	
Chlorobenzene	108-90-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	
Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	
cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	
Cumene	98-82-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	
Cyclohexane	110-82-7	ND	5.0	ug/l	---	ND	5.0	ug/l	---	0.86	5.0	ug/l	J	
Dibromochloromethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	
Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	
Dichlorodifluoromethane	75-71-8	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---	
Ethyl chloride	75-00-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	2.4	1.0	ug/l	---	
Ethylbenzene	100-41-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	
Methyl acetate	79-20-9	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---	
Methyl bromide	74-83-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---	
Methyl chloride	74-87-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	
Methyl cyclohexane	108-87-2	ND	5.0	ug/l	---	ND	5.0	ug/l	---	0.59	5.0	ug/l	J	
Methyl ethyl ketone	78-93-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---	
Methyl isobutyl ketone	108-10-1	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---	
Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	
Methylene chloride	75-09-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---	
Naphthalene - TIC	91-20-3													
Naphthalene, methyl- isomer - TIC	TIC16													
o-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	
Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	
system artifact - TIC	TIC1	100	0	ug/l	NJ	94	0	ug/l	NJ	97	0	ug/l	NJ	
Tetrachloroethene	127-18-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	
Toluene	108-88-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	
Total Alkanes - TIC	TIC20	0	0	ug/l	NJ	0	0	ug/l	NJ	0	0	ug/l	NJ	
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	
trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	
Trichloroethylene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	
Trichlorofluoromethane	75-69-4	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---	
unknown - TIC	TIC10													
Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	
Vinylidene chloride	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	
Volatile organic compounds - TIC	E-12419	0	0	ug/l	NJ	0	0	ug/l	NJ	16.6	0	ug/l	NJ	
Xylene, total	1330-20-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---	

## Analytical Results Summary

CADENA Project ID: E203361  
 Laboratory: Accutest Laboratories - Dayton  
 Laboratory Submittal: JB92906

Metals	Analyte	Sample Name: OB-20A-042115				OB-20A-042115				TB-042115				OB-20B-042115				
		Lab Sample ID: JB92906-1		JB92906-1F		JB92906-2		JB92906-3										
		Sample Date:	4/21/2015	4/21/2015	4/21/2015	4/21/2015	4/21/2015	4/21/2015	4/21/2015	4/21/2015	4/21/2015	4/21/2015	4/21/2015	4/21/2015	4/21/2015	4/21/2015	4/21/2015	
		Cas No.	Report Result	Limit	Units	Valid Qualifier	Report Result	Limit	Units	Valid Qualifier	Report Result	Limit	Units	Valid Qualifier	Report Result	Limit	Units	Valid Qualifier
<u>OSW-6010C</u>	Calcium	7440-70-2	29900	5000	ug/l	---									61700	5000	ug/l	---
	Calcium - Dissolved	7440-70-2					29600	5000	ug/l	---					46700	100	ug/l	---
	Iron	7439-89-6	26800	100	ug/l	---		26400	100	ug/l	---							
	Iron - Dissolved	7439-89-6													11500	5000	ug/l	---
	Magnesium	7439-95-4	ND	5000	ug/l	---		ND	5000	ug/l	---							
	Magnesium - Dissolved	7439-95-4																
	Sodium	7440-23-5	ND	10000	ug/l	---		ND	10000	ug/l	---				ND	10000	ug/l	---
	Sodium - Dissolved	7440-23-5																
<b>General Chemistry</b>																		
<u>APHA-2320</u>	Calcium carbonate	471-34-1	118	13	mg/l	---									230	13	mg/l	---
<u>APHA-2540C</u>	Total dissolved solids	E-10173	144	10	mg/l	---									333	10	mg/l	---
<u>APHA-4500-CO2-D</u>	Alkalinity, Bicarbonate	E-14508	118	5.0	mg/l	---									230	5.0	mg/l	---
<u>APHA-4500-NO2-B</u>	Nitrate	14797-55-8	ND	0.11	mg/l	---									ND	0.11	mg/l	---
	Nitrite	14797-65-0	ND	0.010	mg/l	---									ND	0.010	mg/l	---
<u>EMSLC-353.2</u>	nitrate/nitrite	E-10128	ND	0.10	mg/l	---									ND	0.10	mg/l	---
<u>OSW-9056A</u>	Chloride	16887-00-6	2.2	2.0	mg/l	---									2.1	2.0	mg/l	---
	Sulfate	14808-79-8	ND	2.0	mg/l	---									ND	2.0	mg/l	---

# Analytical Results Summary

CADENA Project ID: E203361

Laboratory: Accutest Laboratories - Dayton

Laboratory Submittal: JB92906

Analyte	Cas No.	Sample Name: OB-20B-042115			OB-27-042115			OB-27-042115		
		Lab Sample ID: JB92906-3F			JB92906-4			JB92906-4F		
		Sample Date: 4/21/2015			4/21/2015			4/21/2015		
Report	Valid	Report	Valid	Report	Valid	Report	Valid	Report	Valid	Report
Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result
Limit	Units	Limit	Units	Limit	Units	Limit	Units	Limit	Units	Limit
<b>GC/MS VOC</b>										
<u>OSW-8260C</u>										
1,1,1-Trichloroethane	71-55-6			ND	1.0	ug/l		---		
1,1,2,2-Tetrachloroethane	79-34-5			ND	1.0	ug/l		---		
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1			ND	5.0	ug/l		---		
1,1,2-Trichloroethane	79-00-5			ND	1.0	ug/l		---		
1,1-Dichloroethane	75-34-3			ND	1.0	ug/l		---		
1,2,4-Trichlorobenzene	120-82-1			ND	1.0	ug/l		---		
1,2-Dibromo-3-chloropropane	96-12-8			ND	2.0	ug/l		---		
1,2-Dichloroethane	107-06-2			ND	1.0	ug/l		---		
1,2-Dichloropropane	78-87-5			ND	1.0	ug/l		---		
1,3-Dichlorobenzene	541-73-1			ND	1.0	ug/l		---		
1,4-Dichlorobenzene	106-46-7			ND	1.0	ug/l		---		
1,2-Dibromoethane	106-93-4			ND	1.0	ug/l		---		
1H-indene-dihydro-dimethyl- isomer - TIC	TIC11			9.0	0	ug/l		NJ		
1H-indene-dihydro-dimethyl- isomer - TIC	TIC12			18	0	ug/l		NJ		
1H-indene-dihydro-dimethyl- isomer - TIC	TIC13			10	0	ug/l		NJ		
1H-indene-dihydro-dimethyl- isomer - TIC	TIC7			17	0	ug/l		NJ		
1H-indene-dihydro-dimethyl- isomer - TIC	TIC8			17	0	ug/l		NJ		
1H-Indene-dihydro-methyl- isomer - TIC	TIC3									
1H-Indene-dihydro-methyl- isomer - TIC	TIC6			19	0	ug/l		NJ		
1H-Indene-dihydro-trimethyl- isomer - TIC	TIC14			8.3	0	ug/l		NJ		
1H-Indene-dihydro-trimethyl- isomer - TIC	TIC15			12	0	ug/l		NJ		
2,3-Dihydro-1H-indene - TIC	496-11-7			12	0	ug/l		NJ		
2-Hexanone	591-78-6			ND	5.0	ug/l		---		
Acetone	67-64-1			ND	10	ug/l		---		
Benzene	71-43-2			3.1	0.50	ug/l		---		
Bromoform	75-25-2			ND	1.0	ug/l		---		
C4 alkyl benzene - TIC	TIC3			10	0	ug/l		NJ		
C4 alkyl benzene - TIC	TIC4			15	0	ug/l		NJ		
C4 alkyl benzene - TIC	TIC5			17	0	ug/l		NJ		
C5 alkyl benzene - TIC	TIC4									
Carbon disulfide	75-15-0			ND	2.0	ug/l		---		
Carbon tetrachloride	56-23-5			ND	1.0	ug/l		---		
Chlorobenzene	108-90-7			ND	1.0	ug/l		---		
Chloroform	67-66-3			ND	1.0	ug/l		---		
cis-1,2-Dichloroethene	156-59-2			ND	1.0	ug/l		---		
cis-1,3-Dichloropropene	10061-01-5			ND	1.0	ug/l		---		
Cumene	98-82-8			3.4	1.0	ug/l		---		
Cyclohexane	110-82-7			1.8	5.0	ug/l	J			
Dibromochloromethane	124-48-1			ND	1.0	ug/l		---		
Dichlorobromomethane	75-27-4			ND	1.0	ug/l		---		
Dichlorodifluoromethane	75-71-8			ND	2.0	ug/l		---		
Ethyl chloride	75-00-3			87.2	1.0	ug/l		---		
Ethylbenzene	100-41-4			ND	1.0	ug/l		---		
Methyl acetate	79-20-9			ND	5.0	ug/l		---		
Methyl bromide	74-83-9			ND	2.0	ug/l		---		
Methyl chloride	74-87-3			ND	1.0	ug/l		---		
Methyl cyclohexane	108-87-2			1.1	5.0	ug/l	J			
Methyl ethyl ketone	78-93-3			ND	10	ug/l		---		
Methyl isobutyl ketone	108-10-1			ND	5.0	ug/l		---		
Methyl tert-butyl ether	1634-04-4			ND	1.0	ug/l		---		
Methylene chloride	75-09-2			ND	2.0	ug/l		---		
Naphthalene - TIC	91-20-3			22	0	ug/l	NJ			
Naphthalene, methyl- isomer - TIC	TIC16			18	0	ug/l	NJ			
o-Dichlorobenzene	95-50-1			ND	1.0	ug/l		---		
Styrene	100-42-5			ND	1.0	ug/l		---		
system artifact - TIC	TIC1			100	0	ug/l	NJ			
Tetrachloroethene	127-18-4			ND	1.0	ug/l		---		
Toluene	108-88-3			ND	1.0	ug/l		---		
Total Alkanes - TIC	TIC20			0	0	ug/l	NJ			
trans-1,2-Dichloroethene	156-60-5			ND	1.0	ug/l		---		
trans-1,3-Dichloropropene	10061-02-6			ND	1.0	ug/l		---		
Trichloroethylene	79-01-6			ND	1.0	ug/l		---		
Trichlorofluoromethane	75-69-4			ND	2.0	ug/l		---		
unknown - TIC	TIC10			9.6	0	ug/l	NJ			
Vinyl chloride	75-01-4			ND	1.0	ug/l		---		
Vinylidene chloride	75-35-4			ND	1.0	ug/l		---		
Volatile organic compounds - TIC	E-12419			213.9	0	ug/l	NJ			
Xylene, total	1330-20-7			ND	1.0	ug/l		---		

## Analytical Results Summary

CADENA Project ID: E203361  
 Laboratory: Accutest Laboratories - Dayton  
 Laboratory Submittal: JB92906

Metals	Analyte	Sample Name: OB-20B-042115			OB-27-042115			OB-27-042115		
		Lab Sample ID: JB92906-3F			JB92906-4			JB92906-4F		
		Sample Date: 4/21/2015			4/21/2015			4/21/2015		
		Report	Valid	Report	Valid	Report	Valid	Report	Valid	
		Cas No.	Result	Limit	Units	Qualifier	Result	Limit	Units	Qualifier
<u>OSW-6010C</u>	Calcium	7440-70-2					42800	5000	ug/l	---
	Calcium - Dissolved	7440-70-2	60000	5000	ug/l	---				
	Iron	7439-89-6					65200	100	ug/l	---
	Iron - Dissolved	7439-89-6	44800	100	ug/l	---				
	Magnesium	7439-95-4					5810	5000	ug/l	---
	Magnesium - Dissolved	7439-95-4	11100	5000	ug/l	---				
	Sodium	7440-23-5					ND	10000	ug/l	---
	Sodium - Dissolved	7440-23-5	ND	10000	ug/l	---				
<b>General Chemistry</b>										
<u>APHA-2320</u>	Calcium carbonate	471-34-1					152	13	mg/l	---
	Total dissolved solids	E-10173					256	20	mg/l	---
<u>APHA-4500-CO2-D</u>	Alkalinity, Bicarbonate	E-14508					152	5.0	mg/l	---
	Nitrate	14797-55-8					ND	0.11	mg/l	---
<u>APHA-4500-NO2-B</u>	Nitrite	14797-65-0					ND	0.010	mg/l	---
	<u>EMSLC-353.2</u>	nitrate/nitrite	E-10128				ND	0.10	mg/l	---
<u>OSW-9056A</u>	Chloride	16887-00-6					2.0	2.0	mg/l	---
	Sulfate	14808-79-8					ND	2.0	mg/l	---



May 12, 2015

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CADENA project ID: E203361  
Project: Ford Ringwood Mines Project  
Project number:  
Laboratory: Accutest Laboratories - Dayton  
Laboratory submittal: JB92926  
Sample date: 2015-04-21  
Report received by CADENA: 2015-05-08  
Initial Data Verification completed by CADENA: 2015-05-12

Data verification for the report specified above was completed using the Ford Motor Company Environmental Laboratory Technical Specification, the CADENA Standard Operating Procedure for the Verification of Environmental Analytical Data and the associated analytical methods as references for evaluating the batch QC, sample data and report content. The EPA National Functional Guidelines for validating organic and inorganic data were used as guidance when addressing out of control QC results and the associated data qualifiers.

2 Water sample(s) were analyzed for GCMS VOC, Metals and General Chemistry parameter(s). 1 Trip blank was analyzed for GCMS VOC parameters.

Sample/MS/MSD Surrogate Recovery, LCS/LCD Recovery, MS/MSD Recovery, MS/MSD RPD, Blank Contamination and Hold Time Exception were reviewed as part of our verification.

Analytical results reported between RDL and MDL are flagged 'J' and considered estimated values.

Qualifiers added during verification have been added to the electronic data which is available for download from the CADENA CLMS. Refer to the attached table of analytical results that have been qualified during verification.

The following minor QC exceptions or missing information were noted:

GCMS VOC client sample detections for Tentatively Identified Compounds (TIC's) should be considered to be estimated and qualified with NJ flags.

GCMS VOC trip blank was non-detect for all target analytes.

GCMS VOC QC batch V4V694 MS recovery outliers were not determined using samples from this submittal so qualification of client sample results was not required based on these sample-specific QC outliers.

Metals method blank had detections below the RL for calcium. Qualification of client sample results was not required based on these method blank detections.

TDS, Chloride and Sulfate method blanks had detections below the RL. Client sample -001 and -002 chloride results should be considered to be non-detect at the concentration reported and qualified with B flags.

The definitions of the qualifiers used for this data package are defined in the analytical report. CADENA valid qualifiers are defined in the table below. To view and download a PDF copy of the laboratory analytical report access the CADENA CLMS at <http://clms.cadenaco.com/index.cfm>.

Please contact me if you have any questions.

Sincerely,

Jim Tomalia

Project Scientist

## CADENA Valid Qualifiers

Valid Qualifiers	Description
<	Less than the reported concentration.
>	Greater than the reported concentration.
B	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was greater than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the reported concentration. For Inorganic methods the sample concentration was greater than the RDL and less than 10x the blank concentration and is considered non-detect at the reported concentration.
E	The analyte / Compound reported exceeds the calibration range and is considered estimated.
EMPC	Estimated Minimum Potential Contamination - Dioxin/Furan analyses only.
J	Indicates an estimated value. This flag is used either when estimating a concentration for a tentatively identified compound or when the data indicates the presence of an analyte / compound but the result is less than the sample Quantitation limit, but greater than zero. The flag is also used in data validation to indicate a reported value should be considered estimated due to associated quality assurance deficiencies.
J-	The result is an estimated quantity, but the result may be biased low.
JH	The sample result is considered estimated and is potentially biased high.
JL	The sample result is considered estimated and is potentially biased low.
NJ	Tentatively identified compound with approximated concentration.
R	Indicates the value is considered to be unusable. (Note: The analyte / compound may or may not be present.)
TNTC	Too Numerous to Count - Asbestos and Microbiological Results.
U	Indicates that the analyte / compound was analyzed for, but not detected.
UB	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was less than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the RDL. For Inorganic methods the sample concentration was less than the RDL and less than 10x the blank concentration and is considered non-detect at the RDL.
UJ	The analyte / compound was not detected above the reported sample Quantitation limit. However, the Quantitation limit is considered to be approximate due to associated quality assurance results and may or may not represent the actual limit of Quantitation to accurately and precisely report the analyte in the sample.

## SAMPLING AND ANALYSIS SUMMARY

CADENA Project ID: E203361

Laboratory: Accutest Laboratories-Dayton

Laboratory Submittal: JB92926

Lab Sample ID	Sample ID	Collection Date (mm/yy/dd)	Collection Time (hh:mm:ss)	GCMS VOC Volatile	Metals by ICP Spectroscopy(D)	Metals by ICP Spectroscopy	Alkalinity in Water	Solids in Water, Dissolved	Carbon Dioxide and Forms of Alkalinity by Calculation	Nitrite in Water - Colorimetric	Nitrate-Nitrite - Cd Reduction	Inorganic Anions by IC
JB92926-1	OB-11R-042115	4/21/2015	5:35:00	X		X	X	X	X	X	X	X
JB92926-1F	OB-11R-042115	4/21/2015	5:35:00		X							
JB92926-2	TB-02-042115	4/21/2015	7:20:00	X								
JB92926-3	RW-6A-042115	4/21/2015	7:20:00	X		X	X	X	X	X	X	X
JB92926-3F	RW-6A-042115	4/21/2015	7:20:00		X							

## Qualified Results Summary

CADENA Project ID: E203361

Laboratory: Accutest Laboratories - Dayton

Laboratory Submittal: JB92926

	Sample Name:	OB-11R-042115	TB-02-042115				RW-6A-042115						
	Lab Sample ID:	JB92926-1	JB92926-2				JB92926-3						
	Sample Date:	4/21/2015	4/21/2015				4/21/2015						
Analyte	Cas No.	Report Result	Limit	Valid Units	Qualifier	Report Result	Limit	Valid Units	Qualifier	Report Result	Limit	Valid Units	Qualifier

### GC/MS VOC

#### OSW-8260C

1H-indene-dihydro-dimethyl- isomer - TIC	TIC3	5.1	0	ug/l	NJ							
1H-Indene-dihydro-methyl- isomer - TIC	TIC2	6.0	0	ug/l	NJ							
1H-Indene-dihydro-methyl- isomer - TIC	TIC6									5.2	0	ug/l
1H-Indene-dihydro-methyl- isomer - TIC	TIC8									8.7	0	ug/l
2,3-Dihydro-1H-indene - TIC	496-11-7									14	0	ug/l
alcohols - TIC	TIC1	26	0	ug/l	NJ							
C4 alkyl benzene - TIC	TIC3									9.8	0	ug/l
C4 alkyl benzene - TIC	TIC4									9.7	0	ug/l
C4 alkyl benzene - TIC	TIC5									7.0	0	ug/l
C4 alkyl benzene - TIC	TIC7									8.2	0	ug/l
Cyclopentane, methyl- - TIC	96-37-7									6.9	0	ug/l
Naphthalene - TIC	91-20-3									10	0	ug/l
Total Alkanes - TIC	TIC20	0	0	ug/l	NJ	0	0	ug/l	NJ	0	0	ug/l
Volatile organic compounds - TIC	E-12419	37.1	0	ug/l	NJ	0	0	ug/l	NJ	79.5	0	ug/l

### General Chemistry

#### OSW-9056A

Chloride	16887-00-6	2.1	2.0	mg/l	B					2.8	2.0	mg/l	B
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## Analytical Results Summary

CADENA Project ID: E203361  
 Laboratory: Accutest Laboratories - Dayton  
 Laboratory Submittal: JB92926

Analyte	Sample Name: OB-11R-042115			OB-11R-042115			TB-02-042115						
	Cas No.	Result	Limit	Units	Valid Qualifier	Report Result	Limit	Units	Valid Qualifier	Report Result	Limit	Units	
GC/MS VOC													
<u>OSW-8260C</u>													
1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---					ND	1.0	ug/l	---
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---					ND	1.0	ug/l	---
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	5.0	ug/l	---					ND	5.0	ug/l	---
1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---					ND	1.0	ug/l	---
1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---					ND	1.0	ug/l	---
1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---					ND	1.0	ug/l	---
1,2-Dibromo-3-chloropropane	96-12-8	ND	2.0	ug/l	---					ND	2.0	ug/l	---
1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---					ND	1.0	ug/l	---
1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---					ND	1.0	ug/l	---
1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---					ND	1.0	ug/l	---
1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---					ND	1.0	ug/l	---
1,2-Dibromoethane	106-93-4	ND	1.0	ug/l	---					ND	1.0	ug/l	---
1H-indene-dihydro-dimethyl- isomer - TIC	TIC3	5.1	0	ug/l	NJ								
1H-Indene-dihydro-methyl- isomer - TIC	TIC2	6.0	0	ug/l	NJ								
1H-Indene-dihydro-methyl- isomer - TIC	TIC6												
1H-Indene-dihydro-methyl- isomer - TIC	TIC8												
2,3-Dihydro-1H-indene - TIC	496-11-7												
2-Hexanone	591-78-6	ND	5.0	ug/l	---					ND	5.0	ug/l	---
Acetone	67-64-1	11.2	10	ug/l	---					ND	10	ug/l	---
alcohols - TIC	TIC1	26	0	ug/l	NJ								
Benzene	71-43-2	2.9	0.50	ug/l	---					ND	0.50	ug/l	---
Bromoform	75-25-2	ND	1.0	ug/l	---					ND	1.0	ug/l	---
C4 alkyl benzene - TIC	TIC3												
C4 alkyl benzene - TIC	TIC4												
C4 alkyl benzene - TIC	TIC5												
C4 alkyl benzene - TIC	TIC7												
Carbon disulfide	75-15-0	ND	2.0	ug/l	---					ND	2.0	ug/l	---
Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---					ND	1.0	ug/l	---
Chlorobenzene	108-90-7	ND	1.0	ug/l	---					ND	1.0	ug/l	---
Chloroform	67-66-3	ND	1.0	ug/l	---					ND	1.0	ug/l	---
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---					ND	1.0	ug/l	---
cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---					ND	1.0	ug/l	---
Cumene	98-82-8	0.81	1.0	ug/l	J					ND	1.0	ug/l	---
Cyclohexane	110-82-7	2.2	5.0	ug/l	J					ND	5.0	ug/l	---
Cyclopentane, methyl- - TIC	96-37-7												
Dibromochloromethane	124-48-1	ND	1.0	ug/l	---					ND	1.0	ug/l	---
Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---					ND	1.0	ug/l	---
Dichlorodifluoromethane	75-71-8	ND	2.0	ug/l	---					ND	2.0	ug/l	---
Ethyl chloride	75-00-3	21.2	1.0	ug/l	---					ND	1.0	ug/l	---
Ethylbenzene	100-41-4	ND	1.0	ug/l	---					ND	1.0	ug/l	---
Methyl acetate	79-20-9	ND	5.0	ug/l	---					ND	5.0	ug/l	---
Methyl bromide	74-83-9	ND	2.0	ug/l	---					ND	2.0	ug/l	---
Methyl chloride	74-87-3	ND	1.0	ug/l	---					ND	1.0	ug/l	---
Methyl cyclohexane	108-87-2	0.44	5.0	ug/l	J					ND	5.0	ug/l	---
Methyl ethyl ketone	78-93-3	ND	10	ug/l	---					ND	10	ug/l	---
Methyl isobutyl ketone	108-10-1	ND	5.0	ug/l	---					ND	5.0	ug/l	---
Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---					ND	1.0	ug/l	---
Methylene chloride	75-09-2	ND	2.0	ug/l	---					ND	2.0	ug/l	---
Naphthalene - TIC	91-20-3												
o-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---					ND	1.0	ug/l	---
Styrene	100-42-5	ND	1.0	ug/l	---					ND	1.0	ug/l	---
Tetrachloroethene	127-18-4	ND	1.0	ug/l	---					ND	1.0	ug/l	---
Toluene	108-88-3	ND	1.0	ug/l	---					ND	1.0	ug/l	---
Total Alkanes - TIC	TIC20	0	0	ug/l	NJ					0	0	ug/l	NJ
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---					ND	1.0	ug/l	---
trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---					ND	1.0	ug/l	---
Trichloroethylene	79-01-6	ND	1.0	ug/l	---					ND	1.0	ug/l	---
Trichlorofluoromethane	75-69-4	ND	2.0	ug/l	---					ND	2.0	ug/l	---
Vinyl chloride	75-01-4	ND	1.0	ug/l	---					ND	1.0	ug/l	---
Vinylidene chloride	75-35-4	ND	1.0	ug/l	---					ND	1.0	ug/l	---
Volatile organic compounds - TIC	E-12419	37.1	0	ug/l	NJ					0	0	ug/l	NJ
Xylene, total	1330-20-7	ND	1.0	ug/l	---					ND	1.0	ug/l	---

## Analytical Results Summary

CADENA Project ID: E203361  
 Laboratory: Accutest Laboratories - Dayton  
 Laboratory Submittal: JB92926

		Sample Name:	OB-11R-042115			OB-11R-042115			TB-02-042115		
	Analyte	Lab Sample ID:	JB92926-1			JB92926-1F			JB92926-2		
		Sample Date:	4/21/2015			4/21/2015			4/21/2015		
			Report	Valid	Report	Report	Valid	Report	Report	Report	Valid
		Cas No.	Result	Limit	Units	Qualifier	Result	Limit	Units	Qualifier	Result
<b>Metals</b>											
	<u>OSW-6010C</u>										
	Calcium	7440-70-2	56300	5000	ug/l	---					
	Calcium - Dissolved	7440-70-2					55400	5000	ug/l	---	
	Iron	7439-89-6	70000	100	ug/l	---					
	Iron - Dissolved	7439-89-6					68800	100	ug/l	---	
	Magnesium	7439-95-4	7150	5000	ug/l	---					
	Magnesium - Dissolved	7439-95-4					7100	5000	ug/l	---	
	Sodium	7440-23-5	ND	10000	ug/l	---					
	Sodium - Dissolved	7440-23-5					ND	10000	ug/l	---	
	<b>General Chemistry</b>										
	<u>APHA-2320</u>										
	Calcium carbonate	471-34-1	205	13	mg/l	---					
	<u>APHA-2540C</u>										
	Total dissolved solids	E-10173	116	40	mg/l	---					
	<u>APHA-4500-CO2-D</u>										
	Alkalinity, Bicarbonate	E-14508	205	5.0	mg/l	---					
	<u>APHA-4500-NO2-B</u>										
	Nitrate	14797-55-8	ND	0.11	mg/l	---					
	Nitrite	14797-65-0	ND	0.010	mg/l	---					
	<u>EMSLC-353.2</u>										
	nitrate/nitrite	E-10128	ND	0.10	mg/l	---					
	<u>OSW-9056A</u>										
	Chloride	16887-00-6	2.1	2.0	mg/l	B					
	Sulfate	14808-79-8	ND	10	mg/l	---					

## Analytical Results Summary

CADENA Project ID: E203361  
 Laboratory: Accutest Laboratories - Dayton  
 Laboratory Submittal: JB92926

Analyte	Sample Name: RW-6A-042115			RW-6A-042115				
	Cas No.	Report		Valid Qualifier	Report			
		Result	Limit		Result	Limit		
<b>GC/MS VOC</b>								
<u>OSW-8260C</u>								
1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---			
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---			
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	5.0	ug/l	---			
1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---			
1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---			
1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---			
1,2-Dibromo-3-chloropropane	96-12-8	ND	2.0	ug/l	---			
1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---			
1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---			
1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---			
1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---			
1,2-Dibromoethane	106-93-4	ND	1.0	ug/l	---			
1H-indene-dihydro-dimethyl- isomer - TIC	TIC3							
1H-Indene-dihydro-methyl- isomer - TIC	TIC2							
1H-Indene-dihydro-methyl- isomer - TIC	TIC6	5.2	0	ug/l	NJ			
1H-Indene-dihydro-methyl- isomer - TIC	TIC8	8.7	0	ug/l	NJ			
2,3-Dihydro-1H-indene - TIC	496-11-7	14	0	ug/l	NJ			
2-Hexanone	591-78-6	ND	5.0	ug/l	---			
Acetone	67-64-1	ND	10	ug/l	---			
alcohols - TIC	TIC1							
Benzene	71-43-2	8.7	0.50	ug/l	---			
Bromoform	75-25-2	ND	1.0	ug/l	---			
C4 alkyl benzene - TIC	TIC3	9.8	0	ug/l	NJ			
C4 alkyl benzene - TIC	TIC4	9.7	0	ug/l	NJ			
C4 alkyl benzene - TIC	TIC5	7.0	0	ug/l	NJ			
C4 alkyl benzene - TIC	TIC7	8.2	0	ug/l	NJ			
Carbon disulfide	75-15-0	ND	2.0	ug/l	---			
Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---			
Chlorobenzene	108-90-7	ND	1.0	ug/l	---			
Chloroform	67-66-3	ND	1.0	ug/l	---			
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---			
cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---			
Cumene	98-82-8	8.5	1.0	ug/l	---			
Cyclohexane	110-82-7	4.2	5.0	ug/l	J			
Cyclopentane, methyl- - TIC	96-37-7	6.9	0	ug/l	NJ			
Dibromochloromethane	124-48-1	ND	1.0	ug/l	---			
Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---			
Dichlorodifluoromethane	75-71-8	ND	2.0	ug/l	---			
Ethyl chloride	75-00-3	2.3	1.0	ug/l	---			
Ethylbenzene	100-41-4	ND	1.0	ug/l	---			
Methyl acetate	79-20-9	ND	5.0	ug/l	---			
Methyl bromide	74-83-9	ND	2.0	ug/l	---			
Methyl chloride	74-87-3	ND	1.0	ug/l	---			
Methyl cyclohexane	108-87-2	1.5	5.0	ug/l	J			
Methyl ethyl ketone	78-93-3	ND	10	ug/l	---			
Methyl isobutyl ketone	108-10-1	ND	5.0	ug/l	---			
Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---			
Methylene chloride	75-09-2	ND	2.0	ug/l	---			
Naphthalene - TIC	91-20-3	10	0	ug/l	NJ			
o-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---			
Styrene	100-42-5	ND	1.0	ug/l	---			
Tetrachloroethene	127-18-4	ND	1.0	ug/l	---			
Toluene	108-88-3	ND	1.0	ug/l	---			
Total Alkanes - TIC	TIC20	0	0	ug/l	NJ			
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---			
trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---			
Trichloroethylene	79-01-6	ND	1.0	ug/l	---			
Trichlorofluoromethane	75-69-4	ND	2.0	ug/l	---			
Vinyl chloride	75-01-4	ND	1.0	ug/l	---			
Vinylidene chloride	75-35-4	ND	1.0	ug/l	---			
Volatile organic compounds - TIC	E-12419	79.5	0	ug/l	NJ			
Xylene, total	1330-20-7	37.5	1.0	ug/l	---			

## Analytical Results Summary

CADENA Project ID: E203361  
 Laboratory: Accutest Laboratories - Dayton  
 Laboratory Submittal: JB92926

Metals	Analyte	Sample Name:	RW-6A-042115	RW-6A-042115				
		Lab Sample ID:	JB92926-3	JB92926-3F				
		Sample Date:	4/21/2015	4/21/2015				
<u>OSW-6010C</u>	Analyte	Cas No.	Report Result	Valid Limit	Report Result	Valid Limit	Valid Units Qualifier	
	Calcium	7440-70-2	80700	5000 ug/l	---	80700	5000 ug/l	---
	Calcium - Dissolved	7440-70-2	7439-89-6	24000 100 ug/l	---	23800	100 ug/l	---
	Iron	7439-89-6	7439-89-6	18600 5000 ug/l	---	18700	5000 ug/l	---
	Iron - Dissolved	7439-89-6	7440-23-5	ND 10000 ug/l	---	ND	10000 ug/l	---
	Magnesium	7439-95-4	7440-23-5	7440-23-5	---	7440-23-5	7440-23-5	---
	Magnesium - Dissolved	7439-95-4	7440-23-5	7440-23-5	---	7440-23-5	7440-23-5	---
	Sodium	7439-95-4	7440-23-5	7440-23-5	---	7440-23-5	7440-23-5	---
	Sodium - Dissolved	7439-95-4	7440-23-5	7440-23-5	---	7440-23-5	7440-23-5	---
<u>General Chemistry</u>	Analyte	Cas No.	Report Result	Valid Limit	Report Result	Valid Limit	Valid Units Qualifier	
	<u>APHA-2320</u>	471-34-1	332	13 mg/l	---			
	Calcium carbonate							
	<u>APHA-2540C</u>	E-10173	413	10 mg/l	---			
	Total dissolved solids							
	<u>APHA-4500-CO2-D</u>	E-14508	332	5.0 mg/l	---			
	Alkalinity, Bicarbonate							
	<u>APHA-4500-NO2-B</u>	14797-55-8	ND	0.11 mg/l	---			
	Nitrate	14797-65-0	ND	0.010 mg/l	---			
	Nitrite							
<u>EMSLC-353.2</u>	nitrate/nitrite	E-10128	ND	0.10 mg/l	---			
	<u>OSW-9056A</u>	16887-00-6	2.8	2.0 mg/l	B			
	Chloride	14808-79-8	ND	10 mg/l	---			
	Sulfate							



May 12, 2015

Tim Roeper  
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Suite 101  
Middletown, NY 10941

CADENA project ID: E203361  
Project: Ford Ringwood Mines Project  
Project number:  
Laboratory: Accutest Laboratories - Dayton  
Laboratory submittal: JB93030  
Sample date: 2015-04-22  
Report received by CADENA: 2015-05-08  
Initial Data Verification completed by CADENA: 2015-05-12

Data verification for the report specified above was completed using the Ford Motor Company Environmental Laboratory Technical Specification, the CADENA Standard Operating Procedure for the Verification of Environmental Analytical Data and the associated analytical methods as references for evaluating the batch QC, sample data and report content. The EPA National Functional Guidelines for validating organic and inorganic data were used as guidance when addressing out of control QC results and the associated data qualifiers.

4 Ground water sample(s) were analyzed for GCMS VOC, Metals and General Chemistry parameter(s).  
5 Surface water and 1 trip blank sample(s) were analyzed for GCMS VOC parameter(s).

Sample/MS/MSD Surrogate Recovery, LCS/LCD Recovery, MS/MSD Recovery, MS/MSD RPD, Blank Contamination and Hold Time Exception were reviewed as part of our verification.

Analytical results reported between RDL and MDL are flagged 'J' and considered estimated values.

Qualifiers added during verification have been added to the electronic data which is available for download from the CADENA CLMS. Refer to the attached table of analytical results that have been qualified during verification.

The following minor QC exceptions or missing information were noted:

GCMS VOC client sample detections for Tentatively Identified Compounds (TIC's) should be considered to be estimated and qualified with NJ flags.

GCMS VOC trip blank was non-detect for all target analytes.

GCMS VOC sample -002 MS/MSD RPD was an outlier for chloromethane. Qualification of client sample results was not required based on this QC outlier alone.

Nitrate-Nitrite QC batch MS recovery outliers were not determined using samples from this submittal so qualification of client sample results was not required based on these sample-specific QC outliers.

Chloride and Sulfate method blanks had detections below the RL. Qualification of client sample results was not required based on these method blank detections.

The definitions of the qualifiers used for this data package are defined in the analytical report. CADENA valid qualifiers are defined in the table below. To view and download a PDF copy of the laboratory analytical report access the CADENA CLMS at <http://clms.cadenaco.com/index.cfm>.

Please contact me if you have any questions.

Sincerely,

Jim Tomalia

Project Scientist

## CADENA Valid Qualifiers

Valid Qualifiers	Description
<	Less than the reported concentration.
>	Greater than the reported concentration.
B	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was greater than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the reported concentration. For Inorganic methods the sample concentration was greater than the RDL and less than 10x the blank concentration and is considered non-detect at the reported concentration.
E	The analyte / Compound reported exceeds the calibration range and is considered estimated.
EMPC	Estimated Minimum Potential Contamination - Dioxin/Furan analyses only.
J	Indicates an estimated value. This flag is used either when estimating a concentration for a tentatively identified compound or when the data indicates the presence of an analyte / compound but the result is less than the sample Quantitation limit, but greater than zero. The flag is also used in data validation to indicate a reported value should be considered estimated due to associated quality assurance deficiencies.
J-	The result is an estimated quantity, but the result may be biased low.
JH	The sample result is considered estimated and is potentially biased high.
JL	The sample result is considered estimated and is potentially biased low.
NJ	Tentatively identified compound with approximated concentration.
R	Indicates the value is considered to be unusable. (Note: The analyte / compound may or may not be present.)
TNTC	Too Numerous to Count - Asbestos and Microbiological Results.
U	Indicates that the analyte / compound was analyzed for, but not detected.
UB	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was less than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the RDL. For Inorganic methods the sample concentration was less than the RDL and less than 10x the blank concentration and is considered non-detect at the RDL.
UJ	The analyte / compound was not detected above the reported sample Quantitation limit. However, the Quantitation limit is considered to be approximate due to associated quality assurance results and may or may not represent the actual limit of Quantitation to accurately and precisely report the analyte in the sample.

## SAMPLING AND ANALYSIS SUMMARY

CADENA Project ID: E203361

Laboratory: Accutest Laboratories-Dayton

Laboratory Submittal: JB93030

Lab Sample ID	Sample ID	Collection Date (mm/yy/dd)	Collection Time (hh:mm:ss)	GCMS VOC Volatile	Metals by ICP Spectroscopy(D)	Metals by ICP Spectroscopy	Alkalinity in Water	Solids in Water, Dissolved	Carbon Dioxide and Forms of Alkalinity by Calculation	Nitrite in Water - Colorimetric	Nitrate-Nitrite - Cd Reduction	Inorganic Anions by IC
JB93030-1	TB-042215	4/22/2015	4:30:00	X								
JB93030-10	SW-PAB-00-042215	4/22/2015	4:30:00	X								
JB93030-2	SC-1-042215	4/22/2015	10:10:00	X		X	X	X	X	X	X	X
JB93030-2F	SC-1-042215	4/22/2015	10:10:00		X							
JB93030-3	DUP-042215	4/22/2015	12:00:00	X		X	X	X	X	X	X	X
JB93030-3F	DUP-042215	4/22/2015	12:00:00		X							
JB93030-4	PMP-POND-042215	4/22/2015	10:30:00	X								
JB93030-5	RW-6-042215	4/22/2015	12:50:00	X		X	X	X	X	X	X	X
JB93030-5F	RW-6-042215	4/22/2015	12:50:00		X							
JB93030-6	SW-PAB-01A-042215	4/22/2015	3:00:00	X								
JB93030-7	SR-3-SEEP-1-042215	4/22/2015	3:25:00	X								
JB93030-8	SW-PAB-01-042215	4/22/2015	3:40:00	X								
JB93030-9	PMP-50-042215	4/22/2015	3:40:00	X		X	X	X	X	X	X	X
JB93030-9F	PMP-50-042215	4/22/2015	3:40:00		X							

## Qualified Results Summary

CADENA Project ID: E203361  
Laboratory: Accutest Laboratories - Dayton  
Laboratory Submittal: JB93030

## Analytical Results Summary

CADENA Project ID: E203361

Laboratory: Accutest Laboratories - Dayton

Laboratory Submittal: JB93030

Analyte	Sample Name: TB-042215				SW-PAB-00-042215				SC-1-042215				SC-1-042215			
	Lab Sample ID: JB93030-1				JB93030-10				JB93030-2				JB93030-2F			
	Sample Date: 4/22/2015				4/22/2015				4/22/2015				4/22/2015			
		Report	Valid		Report	Valid		Report	Valid	Report	Valid		Report	Valid	Report	Valid
	Cas No.	Result	Limit	Units	Qualifier	Result	Limit	Units	Qualifier	Result	Limit	Units	Qualifier	Result	Limit	Units
<b>GC/MS VOC</b>																
<u>OSW-8260C</u>																
1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---			
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---			
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---			
1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---			
1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---			
1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---			
1,2-Dibromo-3-chloropropane	96-12-8	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---			
1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---			
1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---			
1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---			
1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---			
1,2-Dibromoethane	106-93-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---			
2,3-Dihydro-1H-indene - TIC	496-11-7													5.3	0	ug/l
2-Hexanone	591-78-6	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---			
Acetone	67-64-1	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---			
Benzene	71-43-2	ND	0.50	ug/l	---	ND	0.50	ug/l	---	1.7	0.50	ug/l	---			
Bromoform	75-25-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---			
C3 alkyl benzene - TIC	TIC1													6.5	0	ug/l
C4 alkyl benzene - TIC	TIC3													6.3	0	ug/l
C4 alkyl benzene - TIC	TIC4													5.3	0	ug/l
C4 alkyl benzene - TIC	TIC5													8.5	0	ug/l
Carbon disulfide	75-15-0	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---			
Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---			
Chlorobenzene	108-90-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	0.30	1.0	ug/l	J			
Chloroform	67-66-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---			
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---			
cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---			
Cumene	98-82-8	ND	1.0	ug/l	---	ND	1.0	ug/l	---	1.9	1.0	ug/l	---			
Cyclohexane	110-82-7	ND	5.0	ug/l	---	ND	5.0	ug/l	---	1.7	5.0	ug/l	J			
Dibromochloromethane	124-48-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---			
Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---			
Dichlorodifluoromethane	75-71-8	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---			
Ethyl chloride	75-00-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	1.8	1.0	ug/l	---			
Ethylbenzene	100-41-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	3.3	1.0	ug/l	---			
Methyl acetate	79-20-9	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---			
Methyl bromide	74-83-9	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---			
Methyl chloride	74-87-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---			
Methyl cyclohexane	108-87-2	ND	5.0	ug/l	---	ND	5.0	ug/l	---	1.6	5.0	ug/l	J			
Methyl ethyl ketone	78-93-3	ND	10	ug/l	---	ND	10	ug/l	---	ND	10	ug/l	---			
Methyl isobutyl ketone	108-10-1	ND	5.0	ug/l	---	ND	5.0	ug/l	---	ND	5.0	ug/l	---			
Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---			
Methylene chloride	75-09-2	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---			
o-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---			
Styrene	100-42-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---			
Tetrachloroethene	127-18-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---			
Toluene	108-88-3	ND	1.0	ug/l	---	ND	1.0	ug/l	---	0.48	1.0	ug/l	J			
Total Alkanes - TIC	TIC20	0	0	ug/l	NJ	0	0	ug/l	NJ	0	0	ug/l	NJ			
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---			
trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---			
Trichloroethylene	79-01-6	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---			
Trichlorofluoromethane	75-69-4	ND	2.0	ug/l	---	ND	2.0	ug/l	---	ND	2.0	ug/l	---			
Vinyl chloride	75-01-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---			
Vinylidene chloride	75-35-4	ND	1.0	ug/l	---	ND	1.0	ug/l	---	ND	1.0	ug/l	---			
Volatile organic compounds - TIC	E-12419	0	0	ug/l	NJ	0	0	ug/l	NJ	31.9	0	ug/l	NJ			
Xylene, total	1330-20-7	ND	1.0	ug/l	---	ND	1.0	ug/l	---	75.6	1.0	ug/l	---			

## Analytical Results Summary

CADENA Project ID: E203361

**Laboratory:** Accutest Laboratories - Dayton

**Laboratory Submittal: JB93030**

Metals	Analyte	Sample Name: TB-042215		SW-PAB-00-042215				SC-1-042215				SC-1-042215				
		Lab Sample ID: JB93030-1		JB93030-10				JB93030-2				JB93030-2F				
		Sample Date: 4/22/2015		4/22/2015				4/22/2015				4/22/2015				
		Cas No.	Report Result	Valid Limit	Units	Report Result	Valid Limit	Units	Report Result	Valid Limit	Units	Report Result	Valid Limit	Units	Report Result	Valid Limit
	<u>OSW-6010C</u>															
	Calcium	7440-70-2							41000	5000	ug/l	---				
	Calcium - Dissolved	7440-70-2										41600	5000	ug/l	---	
	Iron	7439-89-6							84200	100	ug/l	---				
	Iron - Dissolved	7439-89-6										85800	100	ug/l	---	
	Magnesium	7439-95-4							ND	5000	ug/l	---				
	Magnesium - Dissolved	7439-95-4										ND	5000	ug/l	---	
	Sodium	7440-23-5							ND	10000	ug/l	---				
	Sodium - Dissolved	7440-23-5										ND	10000	ug/l	---	
	<u>General Chemistry</u>															
	<u>APHA-2320</u>															
	Calcium carbonate	471-34-1							165	13	mg/l	---				
	<u>APHA-2540C</u>															
	Total dissolved solids	E-10173							160	25	mg/l	---				
	<u>APHA-4500-CO2-D</u>															
	Alkalinity, Bicarbonate	E-14508							165	5.0	mg/l	---				
	<u>APHA-4500-NO2-B</u>															
	Nitrate	14797-55-8							ND	0.11	mg/l	---				
	Nitrite	14797-65-0							ND	0.010	mg/l	---				
	<u>EMSLC-353.2</u>															
	nitrate/nitrite	E-10128							ND	0.10	mg/l	---				
	<u>OSW-9056A</u>															
	Chloride	16887-00-6							2.0	2.0	mg/l	---				
	Sulfate	14808-79-8							ND	10	mg/l	---				

## Analytical Results Summary

CADENA Project ID: E203361

Laboratory: Accutest Laboratories - Dayton

Laboratory Submittal: JB93030

Analyte	Sample Name: DUP-042215				DUP-042215				PMP-POND-042215				RW-6-042215				
	Lab Sample ID: JB93030-3				JB93030-4				JB93030-5				JB93030-5				
	Sample Date: 4/22/2015				4/22/2015				4/22/2015				4/22/2015				
		Report	Valid	Report	Valid	Report	Valid	Report	Valid	Report	Valid	Report	Valid	Report	Valid	Report	
	Cas No.	Result	Limit	Units	Qualifier	Result	Limit	Units	Qualifier	Result	Limit	Units	Qualifier	Result	Limit	Units	Qualifier
<b>GC/MS VOC</b>																	
<u>OSW-8260C</u>																	
1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---					ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---					ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	5.0	ug/l	---					ND	5.0	ug/l	---	ND	5.0	ug/l	---
1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---					ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---					ND	1.0	ug/l	---	0.50	1.0	ug/l	J
1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---					ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dibromo-3-chloropropane	96-12-8	ND	2.0	ug/l	---					ND	2.0	ug/l	---	ND	2.0	ug/l	---
1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---					ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---					ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---					ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---					ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dibromoethane	106-93-4	ND	1.0	ug/l	---					ND	1.0	ug/l	---	ND	1.0	ug/l	---
2,3-Dihydro-1H-indene - TIC	496-11-7	5.2	0	ug/l	NJ												
2-Hexanone	591-78-6	ND	5.0	ug/l	---					ND	5.0	ug/l	---	ND	5.0	ug/l	---
Acetone	67-64-1	ND	10	ug/l	---					ND	10	ug/l	---	ND	10	ug/l	---
Benzene	71-43-2	1.8	0.50	ug/l	---					ND	0.50	ug/l	---	2.2	0.50	ug/l	---
Bromoform	75-25-2	ND	1.0	ug/l	---					ND	1.0	ug/l	---	ND	1.0	ug/l	---
C3 alkyl benzene - TIC	TIC1	6.1	0	ug/l	NJ												
C4 alkyl benzene - TIC	TIC3	6.0	0	ug/l	NJ												
C4 alkyl benzene - TIC	TIC4	5.0	0	ug/l	NJ												
C4 alkyl benzene - TIC	TIC5	8.1	0	ug/l	NJ												
Carbon disulfide	75-15-0	ND	2.0	ug/l	---					ND	2.0	ug/l	---	ND	2.0	ug/l	---
Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---					ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobenzene	108-90-7	0.33	1.0	ug/l	J					ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroform	67-66-3	ND	1.0	ug/l	---					ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---					ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---					ND	1.0	ug/l	---	ND	1.0	ug/l	---
Cumene	98-82-8	1.8	1.0	ug/l	---					ND	1.0	ug/l	---	ND	1.0	ug/l	---
Cyclohexane	110-82-7	1.6	5.0	ug/l	J					ND	5.0	ug/l	---	ND	5.0	ug/l	---
Dibromochloromethane	124-48-1	ND	1.0	ug/l	---					ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---					ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorodifluoromethane	75-71-8	ND	2.0	ug/l	---					ND	2.0	ug/l	---	ND	2.0	ug/l	---
Ethyl chloride	75-00-3	1.7	1.0	ug/l	---					ND	1.0	ug/l	---	1.7	1.0	ug/l	---
Ethylbenzene	100-41-4	3.3	1.0	ug/l	---					ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methyl acetate	79-20-9	ND	5.0	ug/l	---					ND	5.0	ug/l	---	ND	5.0	ug/l	---
Methyl bromide	74-83-9	ND	2.0	ug/l	---					ND	2.0	ug/l	---	ND	2.0	ug/l	---
Methyl chloride	74-87-3	ND	1.0	ug/l	---					ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methyl cyclohexane	108-87-2	1.6	5.0	ug/l	J					ND	5.0	ug/l	---	ND	5.0	ug/l	---
Methyl ethyl ketone	78-93-3	ND	10	ug/l	---					ND	10	ug/l	---	ND	10	ug/l	---
Methyl isobutyl ketone	108-10-1	ND	5.0	ug/l	---					ND	5.0	ug/l	---	ND	5.0	ug/l	---
Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---					ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylene chloride	75-09-2	ND	2.0	ug/l	---					ND	2.0	ug/l	---	ND	2.0	ug/l	---
o-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---					ND	1.0	ug/l	---	ND	1.0	ug/l	---
Styrene	100-42-5	ND	1.0	ug/l	---					ND	1.0	ug/l	---	ND	1.0	ug/l	---
Tetrachloroethene	127-18-4	ND	1.0	ug/l	---					ND	1.0	ug/l	---	ND	1.0	ug/l	---
Toluene	108-88-3	0.44	1.0	ug/l	J					ND	1.0	ug/l	---	ND	1.0	ug/l	---
Total Alkanes - TIC	TIC20	0	0	ug/l	NJ					0	0	ug/l	NJ	0	0	ug/l	NJ
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---					ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---					ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichloroethylene	79-01-6	ND	1.0	ug/l	---					ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichlorofluoromethane	75-69-4	ND	2.0	ug/l	---					ND	2.0	ug/l	---	ND	2.0	ug/l	---
Vinyl chloride	75-01-4	ND	1.0	ug/l	---					ND	1.0	ug/l	---	ND	1.0	ug/l	---
Vinylidene chloride	75-35-4	ND	1.0	ug/l	---					ND	1.0	ug/l	---	ND	1.0	ug/l	---
Volatile organic compounds - TIC	E-12419	30.4	0	ug/l	NJ					0	0	ug/l	NJ	0	0	ug/l	NJ
Xylene, total	1330-20-7	73.5	1.0	ug/l	---					ND	1.0	ug/l	---	ND	1.0	ug/l	---

## Analytical Results Summary

CADENA Project ID: E203361

Laboratory: Accutest Laboratories - Dayton

Laboratory Submittal: JB93030

		Sample Name:	DUP-042215			DUP-042215			PMP-POND-042215			RW-6-042215			
		Lab Sample ID:	JB93030-3			JB93030-4			JB93030-5			JB93030-5			
		Sample Date:	4/22/2015			4/22/2015			4/22/2015			4/22/2015			
	Analyte	Cas No.	Report Result	Valid Limit	Report Units	Valid Qualifier	Report Result	Valid Limit	Report Units	Valid Qualifier	Report Result	Valid Limit	Report Units	Valid Qualifier	
<b>Metals</b>	<u>OSW-6010C</u>														
	Calcium	7440-70-2	41400	5000	ug/l	---							73100	5000	ug/l
	Calcium - Dissolved	7440-70-2					42400	5000	ug/l	---					---
	Iron	7439-89-6	84400	100	ug/l	---							40400	100	ug/l
	Iron - Dissolved	7439-89-6					87000	100	ug/l	---					---
	Magnesium	7439-95-4		ND	5000	ug/l	---						12400	5000	ug/l
	Magnesium - Dissolved	7439-95-4					ND	5000	ug/l	---					---
	Sodium	7440-23-5		ND	10000	ug/l	---						ND	10000	ug/l
	Sodium - Dissolved	7440-23-5					ND	10000	ug/l	---					---
<b>General Chemistry</b>	<u>APHA-2320</u>														
	Calcium carbonate	471-34-1	159	13	mg/l	---							254	13	mg/l
	<u>APHA-2540C</u>														
	Total dissolved solids	E-10173	103	25	mg/l	---							285	25	mg/l
	<u>APHA-4500-CO2-D</u>														
	Alkalinity, Bicarbonate	E-14508	159	5.0	mg/l	---							253	5.0	mg/l
	<u>APHA-4500-NO2-B</u>														
	Nitrate	14797-55-8	ND	0.11	mg/l	---							ND	0.11	mg/l
	Nitrite	14797-65-0	ND	0.010	mg/l	---							ND	0.010	mg/l
	<u>EMSLC-353.2</u>														
	nitrate/nitrite	E-10128	ND	0.10	mg/l	---							ND	0.10	mg/l
<u>OSW-9056A</u>	Chloride	16887-00-6	2.0	2.0	mg/l	---							11.2	2.0	mg/l
	Sulfate	14808-79-8	ND	10	mg/l	---							ND	10	mg/l

## Analytical Results Summary

CADENA Project ID: E203361

Laboratory: Accutest Laboratories - Dayton

Laboratory Submittal: JB93030

Analyte	Sample Name: RW-6-042215			SW-PAB-01A-042215			SR-3-SEEP-1-042215			SW-PAB-01-042215			
	Lab Sample ID: JB93030-5F			JB93030-6			JB93030-7			JB93030-8			
	Sample Date: 4/22/2015			4/22/2015			4/22/2015			4/22/2015			
	Report	Valid	Report	Valid	Report	Valid	Report	Valid	Report	Valid	Report	Valid	
	Cas No.	Result	Limit	Units	Qualifier	Result	Limit	Units	Qualifier	Result	Limit	Units	
GC/MS VOC													
<u>OSW-8260C</u>													
1,1,1-Trichloroethane	71-55-6					ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2,2-Tetrachloroethane	79-34-5					ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1					ND	5.0	ug/l	---	ND	5.0	ug/l	---
1,1,2-Trichloroethane	79-00-5					ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,1-Dichloroethane	75-34-3					ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2,4-Trichlorobenzene	120-82-1					ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dibromo-3-chloropropane	96-12-8					ND	2.0	ug/l	---	ND	2.0	ug/l	---
1,2-Dichloroethane	107-06-2					ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dichloropropane	78-87-5					ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,3-Dichlorobenzene	541-73-1					ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,4-Dichlorobenzene	106-46-7					ND	1.0	ug/l	---	ND	1.0	ug/l	---
1,2-Dibromoethane	106-93-4					ND	1.0	ug/l	---	ND	1.0	ug/l	---
2,3-Dihydro-1H-indene - TIC	496-11-7												
2-Hexanone	591-78-6					ND	5.0	ug/l	---	ND	5.0	ug/l	---
Acetone	67-64-1					ND	10	ug/l	---	ND	10	ug/l	---
Benzene	71-43-2					ND	0.50	ug/l	---	ND	0.50	ug/l	---
Bromoform	75-25-2					ND	1.0	ug/l	---	ND	1.0	ug/l	---
C3 alkyl benzene - TIC	TIC1												
C4 alkyl benzene - TIC	TIC3												
C4 alkyl benzene - TIC	TIC4												
C4 alkyl benzene - TIC	TIC5												
Carbon disulfide	75-15-0					ND	2.0	ug/l	---	ND	2.0	ug/l	---
Carbon tetrachloride	56-23-5					ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chlorobenzene	108-90-7					ND	1.0	ug/l	---	ND	1.0	ug/l	---
Chloroform	67-66-3					ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,2-Dichloroethene	156-59-2					ND	1.0	ug/l	---	ND	1.0	ug/l	---
cis-1,3-Dichloropropene	10061-01-5					ND	1.0	ug/l	---	ND	1.0	ug/l	---
Cumene	98-82-8					ND	1.0	ug/l	---	ND	1.0	ug/l	---
Cyclohexane	110-82-7					ND	5.0	ug/l	---	ND	5.0	ug/l	---
Dibromochloromethane	124-48-1					ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorobromomethane	75-27-4					ND	1.0	ug/l	---	ND	1.0	ug/l	---
Dichlorodifluoromethane	75-71-8					ND	2.0	ug/l	---	ND	2.0	ug/l	---
Ethyl chloride	75-00-3					ND	1.0	ug/l	---	ND	1.0	ug/l	---
Ethylbenzene	100-41-4					ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methyl acetate	79-20-9					ND	5.0	ug/l	---	ND	5.0	ug/l	---
Methyl bromide	74-83-9					ND	2.0	ug/l	---	ND	2.0	ug/l	---
Methyl chloride	74-87-3					ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methyl cyclohexane	108-87-2					ND	5.0	ug/l	---	ND	5.0	ug/l	---
Methyl ethyl ketone	78-93-3					ND	10	ug/l	---	ND	10	ug/l	---
Methyl isobutyl ketone	108-10-1					ND	5.0	ug/l	---	ND	5.0	ug/l	---
Methyl tert-butyl ether	1634-04-4					ND	1.0	ug/l	---	ND	1.0	ug/l	---
Methylene chloride	75-09-2					ND	2.0	ug/l	---	ND	2.0	ug/l	---
o-Dichlorobenzene	95-50-1					ND	1.0	ug/l	---	ND	1.0	ug/l	---
Styrene	100-42-5					ND	1.0	ug/l	---	ND	1.0	ug/l	---
Tetrachloroethene	127-18-4					ND	1.0	ug/l	---	ND	1.0	ug/l	---
Toluene	108-88-3					ND	1.0	ug/l	---	ND	1.0	ug/l	---
Total Alkanes - TIC	TIC20					0	0	ug/l	NJ	0	0	ug/l	NJ
trans-1,2-Dichloroethene	156-60-5					ND	1.0	ug/l	---	ND	1.0	ug/l	---
trans-1,3-Dichloropropene	10061-02-6					ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichloroethylene	79-01-6					ND	1.0	ug/l	---	ND	1.0	ug/l	---
Trichlorofluoromethane	75-69-4					ND	2.0	ug/l	---	ND	2.0	ug/l	---
Vinyl chloride	75-01-4					ND	1.0	ug/l	---	ND	1.0	ug/l	---
Vinylidene chloride	75-35-4					ND	1.0	ug/l	---	ND	1.0	ug/l	---
Volatile organic compounds - TIC	E-12419					0	0	ug/l	NJ	0	0	ug/l	NJ
Xylene, total	1330-20-7					ND	1.0	ug/l	---	ND	1.0	ug/l	---

## Analytical Results Summary

CADENA Project ID: E203361

Laboratory: Accutest Laboratories - Dayton

Laboratory Submittal: JB93030

		Sample Name:	RW-6-042215	SW-PAB-01A-042215	SR-3-SEEP-1-042215	SW-PAB-01-042215
	Analyte	Lab Sample ID:	JB93030-5F	JB93030-6	JB93030-7	JB93030-8
		Sample Date:	4/22/2015	4/22/2015	4/22/2015	4/22/2015
<b>Metals</b>						
		Report	Valid	Report	Valid	Report
	Analyte	Cas No.	Result	Limit	Units	Qualifier
<u>OSW-6010C</u>						
	Calcium	7440-70-2				
	Calcium - Dissolved	7440-70-2	70900	5000	ug/l	---
	Iron	7439-89-6				
	Iron - Dissolved	7439-89-6	33200	100	ug/l	---
	Magnesium	7439-95-4				
	Magnesium - Dissolved	7439-95-4	12000	5000	ug/l	---
	Sodium	7440-23-5				
	Sodium - Dissolved	7440-23-5	ND	10000	ug/l	---
<b>General Chemistry</b>						
<u>APHA-2320</u>						
	Calcium carbonate		471-34-1			
<u>APHA-2540C</u>						
	Total dissolved solids		E-10173			
<u>APHA-4500-CO2-D</u>						
	Alkalinity, Bicarbonate		E-14508			
<u>APHA-4500-NO2-B</u>						
	Nitrate		14797-55-8			
	Nitrite		14797-65-0			
<u>EMSLC-353.2</u>						
	nitrate/nitrite		E-10128			
<u>OSW-9056A</u>						
	Chloride		16887-00-6			
	Sulfate		14808-79-8			

## Analytical Results Summary

CADENA Project ID: E203361

Laboratory: Accutest Laboratories - Dayton

Laboratory Submittal: JB93030

Analyte	Sample Name: PMP-50-042215			PMP-50-042215						
	Cas No.	Report	Valid	Report	Valid					
		Result	Limit	Units	Qualifier	Result	Limit	Units	Qualifier	
<b>GC/MS VOC</b>										
<u>OSW-8260C</u>										
1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---					
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---					
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	5.0	ug/l	---					
1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---					
1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---					
1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---					
1,2-Dibromo-3-chloropropane	96-12-8	ND	2.0	ug/l	---					
1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---					
1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---					
1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---					
1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---					
1,2-Dibromoethane	106-93-4	ND	1.0	ug/l	---					
2,3-Dihydro-1H-indene - TIC	496-11-7									
2-Hexanone	591-78-6	ND	5.0	ug/l	---					
Acetone	67-64-1	ND	10	ug/l	---					
Benzene	71-43-2	ND	0.50	ug/l	---					
Bromoform	75-25-2	ND	1.0	ug/l	---					
C3 alkyl benzene - TIC	TIC1									
C4 alkyl benzene - TIC	TIC3									
C4 alkyl benzene - TIC	TIC4									
C4 alkyl benzene - TIC	TIC5									
Carbon disulfide	75-15-0	ND	2.0	ug/l	---					
Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---					
Chlorobenzene	108-90-7	ND	1.0	ug/l	---					
Chloroform	67-66-3	ND	1.0	ug/l	---					
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---					
cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---					
Cumene	98-82-8	ND	1.0	ug/l	---					
Cyclohexane	110-82-7	ND	5.0	ug/l	---					
Dibromochloromethane	124-48-1	ND	1.0	ug/l	---					
Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---					
Dichlorodifluoromethane	75-71-8	ND	2.0	ug/l	---					
Ethyl chloride	75-00-3	ND	1.0	ug/l	---					
Ethylbenzene	100-41-4	ND	1.0	ug/l	---					
Methyl acetate	79-20-9	ND	5.0	ug/l	---					
Methyl bromide	74-83-9	ND	2.0	ug/l	---					
Methyl chloride	74-87-3	ND	1.0	ug/l	---					
Methyl cyclohexane	108-87-2	ND	5.0	ug/l	---					
Methyl ethyl ketone	78-93-3	ND	10	ug/l	---					
Methyl isobutyl ketone	108-10-1	ND	5.0	ug/l	---					
Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---					
Methylene chloride	75-09-2	ND	2.0	ug/l	---					
o-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---					
Styrene	100-42-5	ND	1.0	ug/l	---					
Tetrachloroethene	127-18-4	ND	1.0	ug/l	---					
Toluene	108-88-3	ND	1.0	ug/l	---					
Total Alkanes - TIC	TIC20	0	0	ug/l	NJ					
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---					
trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---					
Trichloroethylene	79-01-6	ND	1.0	ug/l	---					
Trichlorofluoromethane	75-69-4	ND	2.0	ug/l	---					
Vinyl chloride	75-01-4	ND	1.0	ug/l	---					
Vinylidene chloride	75-35-4	ND	1.0	ug/l	---					
Volatile organic compounds - TIC	E-12419	0	0	ug/l	NJ					
Xylene, total	1330-20-7	ND	1.0	ug/l	---					

## Analytical Results Summary

CADENA Project ID: E203361

Laboratory: Accutest Laboratories - Dayton

Laboratory Submittal: JB93030

Metals	Analyte	Sample Name: PMP-50-042215				PMP-50-042215				
		Lab Sample ID: JB93030-9		JB93030-9F						
		Sample Date: 4/22/2015		4/22/2015						
		Report	Valid	Report	Valid	Report	Valid	Report	Valid	
		Cas No.	Result	Limit	Units	Qualifier	Result	Limit	Units	
<u>OSW-6010C</u>										
Calcium		7440-70-2	ND	5000	ug/l	---				
Calcium - Dissolved		7440-70-2					ND	5000	ug/l	
Iron		7439-89-6	253	100	ug/l	---				
Iron - Dissolved		7439-89-6					496	100	ug/l	
Magnesium		7439-95-4	ND	5000	ug/l	---				
Magnesium - Dissolved		7439-95-4					ND	5000	ug/l	
Sodium		7440-23-5	ND	10000	ug/l	---				
Sodium - Dissolved		7440-23-5					ND	10000	ug/l	
<u>General Chemistry</u>										
<u>APHA-2320</u>										
Calcium carbonate		471-34-1	33.1	13	mg/l	---				
<u>APHA-2540C</u>										
Total dissolved solids		E-10173	ND	10	mg/l	---				
<u>APHA-4500-CO2-D</u>										
Alkalinity, Bicarbonate		E-14508	33.1	5.0	mg/l	---				
<u>APHA-4500-NO2-B</u>										
Nitrate		14797-55-8	ND	0.11	mg/l	---				
Nitrite		14797-65-0	ND	0.010	mg/l	---				
<u>EMSLC-353.2</u>										
nitrate/nitrite		E-10128	ND	0.10	mg/l	---				
<u>OSW-9056A</u>										
Chloride		16887-00-6	ND	2.0	mg/l	---				
Sulfate		14808-79-8	ND	10	mg/l	---				

May 12, 2015

Tim Roeper  
Cornerstone EG  
100 Crystal Run Road  
Suite 101  
Middletown, NY 10941

CADENA project ID: E203361  
Project: Ford Ringwood Mines Project  
Project number:  
Laboratory: Accutest Laboratories - Dayton  
Laboratory submittal: JB93282  
Sample date: 2015-04-24  
Report received by CADENA: 2015-05-12  
Initial Data Verification completed by CADENA: 2015-05-12

Data verification for the report specified above was completed using the Ford Motor Company Environmental Laboratory Technical Specification, the CADENA Standard Operating Procedure for the Verification of Environmental Analytical Data and the associated analytical methods as references for evaluating the batch QC, sample data and report content. The EPA National Functional Guidelines for validating organic and inorganic data were used as guidance when addressing out of control QC results and the associated data qualifiers.

2 Water sample(s) were analyzed for GCMS VOC, Metals and General Chemistry parameter(s). 1 Trip blank was analyzed for GCMS VOC parameters.

Sample/MS/MSD Surrogate Recovery, LCS/LCD Recovery, Blank Contamination and Hold Time Exception were reviewed as part of our verification.

Analytical results reported between RDL and MDL are flagged 'J' and considered estimated values.

Qualifiers added during verification have been added to the electronic data which is available for download from the CADENA CLMS. Refer to the attached table of analytical results that have been qualified during verification.

The following minor QC exceptions or missing information were noted:

GCMS VOC client sample detections for Tentatively Identified Compounds (TIC's) should be considered to be estimated and qualified with NJ flags.

GCMS VOC trip blank was non-detect for all target analytes.

Nitrate/nitrite QC batch sample duplicate RPD outliers were not determined using samples from this submittal so qualification of client sample results was not required based on these sample-specific QC outliers.

Metals method blank had detections below the RL for calcium and iron. Qualification of client sample results was not required based on these method blank detections.

The definitions of the qualifiers used for this data package are defined in the analytical report. CADENA valid qualifiers are defined in the table below. To view and download a PDF copy of the laboratory analytical report access the CADENA CLMS at <http://clms.cadenaco.com/index.cfm>.

Please contact me if you have any questions.

Sincerely,

Jim Tomalia, Project Scientist

# CADENA Valid Qualifiers

<b>Valid Qualifiers</b>	<b>Description</b>
<	Less than the reported concentration.
>	Greater than the reported concentration.
B	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was greater than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the reported concentration. For Inorganic methods the sample concentration was greater than the RDL and less than 10x the blank concentration and is considered non-detect at the reported concentration.
E	The analyte / Compound reported exceeds the calibration range and is considered estimated.
EMPC	Estimated Minimum Potential Contamination - Dioxin/Furan analyses only.
J	Indicates an estimated value. This flag is used either when estimating a concentration for a tentatively identified compound or when the data indicates the presence of an analyte / compound but the result is less than the sample Quantitation limit, but greater than zero. The flag is also used in data validation to indicate a reported value should be considered estimated due to associated quality assurance deficiencies.
J-	The result is an estimated quantity, but the result may be biased low.
JH	The sample result is considered estimated and is potentially biased high.
JL	The sample result is considered estimated and is potentially biased low.
NJ	Tentatively identified compound with approximated concentration.
R	Indicates the value is considered to be unusable. (Note: The analyte / compound may or may not be present.)
TNTC	Too Numerous to Count - Asbestos and Microbiological Results.
U	Indicates that the analyte / compound was analyzed for, but not detected.
UB	The analyte / compound was detected in the associated blank. For Organic methods the sample concentration was less than the RDL and less than 5x (or 10x for common lab contaminates) the blank concentration and is considered non-detect at the RDL. For Inorganic methods the sample concentration was less than the RDL and less than 10x the blank concentration and is considered non-detect at the RDL.
UJ	The analyte / compound was not detected above the reported sample Quantitation limit. However, the Quantitation limit is considered to be approximate due to associated quality assurance results and may or may not represent the actual limit of Quantitation to accurately and precisely report the analyte in the sample.

## SAMPLING AND ANALYSIS SUMMARY

CADENA Project ID: E203361

**Laboratory:** Accutest Laboratories-Dayton

Laboratory Submittal: JB93282

## Qualified Results Summary

CADENA Project ID: E203361

Laboratory: Accutest Laboratories - Dayton

Laboratory Submittal: JB93282

	Sample Name:	PMP-180-042415				PMP-230-042415				TRIP BLANK 4-23-15			
	Lab Sample ID:	JB93282-1				JB93282-2				JB93282-3			
	Sample Date:	4/24/2015				4/24/2015				4/24/2015			
Analyte	Cas No.	Report		Valid	Qualifier	Report		Valid	Qualifier	Report		Valid	Qualifier
		Result	Limit			Result	Limit			Units	Units		

### GC/MS VOC

#### OSW-8260C

Total Alkanes - TIC	TIC20	0	0	ug/l	NJ	0	0	ug/l	NJ	0	0	ug/l	NJ
Volatile organic compounds - TIC	E-12419	0	0	ug/l	NJ	0	0	ug/l	NJ	0	0	ug/l	NJ

## Analytical Results Summary

CADENA Project ID: E203361  
 Laboratory: Accutest Laboratories - Dayton  
 Laboratory Submittal: JB93282

Analyte	Sample Name: PMP-180-042415				PMP-180-042415				PMP-230-042415				PMP-230-042415				
	Cas No.	Report	Valid	Report	Valid	Report	Valid	Report	Valid	Report	Valid	Report	Valid	Report	Valid	Report	
		Result	Limit	Units	Qualifier	Result	Limit	Units	Qualifier	Result	Limit	Units	Qualifier	Result	Limit	Units	Qualifier
<b>GC/MS VOC</b>																	
<u>OSW-8260C</u>																	
1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---					ND	1.0	ug/l	---				
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---					ND	1.0	ug/l	---				
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	5.0	ug/l	---					ND	5.0	ug/l	---				
1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---					ND	1.0	ug/l	---				
1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---					0.75	1.0	ug/l	J				
1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---					ND	1.0	ug/l	---				
1,2-Dibromo-3-chloropropane	96-12-8	ND	2.0	ug/l	---					ND	2.0	ug/l	---				
1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---					ND	1.0	ug/l	---				
1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---					ND	1.0	ug/l	---				
1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---					ND	1.0	ug/l	---				
1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---					0.51	1.0	ug/l	J				
1,2-Dibromoethane	106-93-4	ND	1.0	ug/l	---					ND	1.0	ug/l	---				
2-Hexanone	591-78-6	ND	5.0	ug/l	---					ND	5.0	ug/l	---				
Acetone	67-64-1	ND	10	ug/l	---					ND	10	ug/l	---				
Benzene	71-43-2	2.3	0.50	ug/l	---					7.8	0.50	ug/l	---				
Bromoform	75-25-2	ND	1.0	ug/l	---					ND	1.0	ug/l	---				
Carbon disulfide	75-15-0	ND	2.0	ug/l	---					ND	2.0	ug/l	---				
Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---					ND	1.0	ug/l	---				
Chlorobenzene	108-90-7	0.49	1.0	ug/l	J					1.4	1.0	ug/l	---				
Chloroform	67-66-3	ND	1.0	ug/l	---					ND	1.0	ug/l	---				
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---					0.61	1.0	ug/l	J				
cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---					ND	1.0	ug/l	---				
Cumene	98-82-8	0.64	1.0	ug/l	J					1.8	1.0	ug/l	---				
Cyclohexane	110-82-7	0.42	5.0	ug/l	J					1.3	5.0	ug/l	J				
Dibromochloromethane	124-48-1	ND	1.0	ug/l	---					ND	1.0	ug/l	---				
Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---					ND	1.0	ug/l	---				
Dichlorodifluoromethane	75-71-8	ND	2.0	ug/l	---					ND	2.0	ug/l	---				
Ethyl chloride	75-00-3	7.9	1.0	ug/l	---					29.1	1.0	ug/l	---				
Ethylbenzene	100-41-4	ND	1.0	ug/l	---					ND	1.0	ug/l	---				
Methyl acetate	79-20-9	ND	5.0	ug/l	---					ND	5.0	ug/l	---				
Methyl bromide	74-83-9	ND	2.0	ug/l	---					ND	2.0	ug/l	---				
Methyl chloride	74-87-3	ND	1.0	ug/l	---					ND	1.0	ug/l	---				
Methyl cyclohexane	108-87-2	ND	5.0	ug/l	---					0.37	5.0	ug/l	J				
Methyl ethyl ketone	78-93-3	ND	10	ug/l	---					ND	10	ug/l	---				
Methyl isobutyl ketone	108-10-1	ND	5.0	ug/l	---					ND	5.0	ug/l	---				
Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---					ND	1.0	ug/l	---				
Methylene chloride	75-09-2	ND	2.0	ug/l	---					ND	2.0	ug/l	---				
o-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---					ND	1.0	ug/l	---				
Styrene	100-42-5	ND	1.0	ug/l	---					ND	1.0	ug/l	---				
Tetrachloroethene	127-18-4	ND	1.0	ug/l	---					ND	1.0	ug/l	---				
Toluene	108-88-3	ND	1.0	ug/l	---					0.20	1.0	ug/l	J				
Total Alkanes - TIC	TIC20	0	0	ug/l	NJ					0	0	ug/l	NJ				
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---					ND	1.0	ug/l	---				
trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---					ND	1.0	ug/l	---				
Trichloroethylene	79-01-6	ND	1.0	ug/l	---					ND	1.0	ug/l	---				
Trichlorofluoromethane	75-69-4	ND	2.0	ug/l	---					ND	2.0	ug/l	---				
Vinyl chloride	75-01-4	ND	1.0	ug/l	---					0.43	1.0	ug/l	J				
Vinyldene chloride	75-35-4	ND	1.0	ug/l	---					ND	1.0	ug/l	---				
Volatile organic compounds - TIC	E-12419	0	0	ug/l	NJ					0	0	ug/l	NJ				
Xylene, total	1330-20-7	ND	1.0	ug/l	---					0.83	1.0	ug/l	J				

## Analytical Results Summary

CADENA Project ID: E203361  
 Laboratory: Accutest Laboratories - Dayton  
 Laboratory Submittal: JB93282

Metals	Analyte	Cas No.	Sample Name: PMP-180-042415			PMP-180-042415			PMP-230-042415			PMP-230-042415				
			Lab Sample ID: JB93282-1			JB93282-1F			JB93282-2			JB93282-2F				
			Sample Date:	4/24/2015		4/24/2015		4/24/2015		4/24/2015		4/24/2015		4/24/2015		
			Report	Valid	Report	Valid	Report	Valid	Report	Valid	Report	Valid	Report	Valid		
			Result	Limit	Units	Qualifier	Result	Limit	Units	Qualifier	Result	Limit	Units	Qualifier		
	<u>OSW-6010C</u>															
	Calcium	7440-70-2	57000	5000	ug/l	---					25300	5000	ug/l	---		
	Calcium - Dissolved	7440-70-2					58600	5000	ug/l	---			23800	5000	ug/l	---
	Iron	7439-89-6	91600	100	ug/l	---					38000	100	ug/l	---		
	Iron - Dissolved	7439-89-6					93600	100	ug/l	---			35800	100	ug/l	---
	Magnesium	7439-95-4	ND	5000	ug/l	---					ND	5000	ug/l	---		
	Magnesium - Dissolved	7439-95-4					ND	5000	ug/l	---			ND	5000	ug/l	---
	Sodium	7440-23-5	ND	10000	ug/l	---					ND	10000	ug/l	---		
	Sodium - Dissolved	7440-23-5					ND	10000	ug/l	---			ND	10000	ug/l	---
	<b>General Chemistry</b>															
	<u>APHA-2320</u>										96.8	13	mg/l	---		
	Calcium carbonate	471-34-1	239	13	mg/l	---										
	<u>APHA-2540C</u>										118	17	mg/l	---		
	Total dissolved solids	E-10173	203	25	mg/l	---										
	<u>APHA-4500-CO2-D</u>										96.8	5.0	mg/l	---		
	Alkalinity, Bicarbonate	E-14508	239	5.0	mg/l	---										
	<u>APHA-4500-NO2-B</u>															
	Nitrate	14797-55-8	0.43	0.11	mg/l	---					ND	0.11	mg/l	---		
	Nitrite	14797-65-0	ND	0.010	mg/l	---					ND	0.010	mg/l	---		
	<u>EMSLC-353.2</u>															
	nitrate/nitrite	E-10128	0.43	0.10	mg/l	---					ND	0.10	mg/l	---		
	<u>OSW-9056A</u>															
	Chloride	16887-00-6	2.5	2.0	mg/l	---					ND	2.0	mg/l	---		
	Sulfate	14808-79-8	ND	10	mg/l	---					ND	10	mg/l	---		

## Analytical Results Summary

CADENA Project ID: E203361  
Laboratory: Accutest Laboratories - Dayton  
Laboratory Submittal: JB93282

Analyte	Report					Valid				
	Cas No.	Result	Limit	Units	Qualifier					
					Sample Name: TRIP BLANK 4-23-15					
<b>GC/MS VOC</b>										
<b>OSW-8260C</b>										
1,1,1-Trichloroethane	71-55-6	ND	1.0	ug/l	---					
1,1,2,2-Tetrachloroethane	79-34-5	ND	1.0	ug/l	---					
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	5.0	ug/l	---					
1,1,2-Trichloroethane	79-00-5	ND	1.0	ug/l	---					
1,1-Dichloroethane	75-34-3	ND	1.0	ug/l	---					
1,2,4-Trichlorobenzene	120-82-1	ND	1.0	ug/l	---					
1,2-Dibromo-3-chloropropane	96-12-8	ND	2.0	ug/l	---					
1,2-Dichloroethane	107-06-2	ND	1.0	ug/l	---					
1,2-Dichloropropane	78-87-5	ND	1.0	ug/l	---					
1,3-Dichlorobenzene	541-73-1	ND	1.0	ug/l	---					
1,4-Dichlorobenzene	106-46-7	ND	1.0	ug/l	---					
1,2-Dibromoethane	106-93-4	ND	1.0	ug/l	---					
2-Hexanone	591-78-6	ND	5.0	ug/l	---					
Acetone	67-64-1	ND	10	ug/l	---					
Benzene	71-43-2	ND	0.50	ug/l	---					
Bromoform	75-25-2	ND	1.0	ug/l	---					
Carbon disulfide	75-15-0	ND	2.0	ug/l	---					
Carbon tetrachloride	56-23-5	ND	1.0	ug/l	---					
Chlorobenzene	108-90-7	ND	1.0	ug/l	---					
Chloroform	67-66-3	ND	1.0	ug/l	---					
cis-1,2-Dichloroethene	156-59-2	ND	1.0	ug/l	---					
cis-1,3-Dichloropropene	10061-01-5	ND	1.0	ug/l	---					
Cumene	98-82-8	ND	1.0	ug/l	---					
Cyclohexane	110-82-7	ND	5.0	ug/l	---					
Dibromochloromethane	124-48-1	ND	1.0	ug/l	---					
Dichlorobromomethane	75-27-4	ND	1.0	ug/l	---					
Dichlorodifluoromethane	75-71-8	ND	2.0	ug/l	---					
Ethyl chloride	75-00-3	ND	1.0	ug/l	---					
Ethylbenzene	100-41-4	ND	1.0	ug/l	---					
Methyl acetate	79-20-9	ND	5.0	ug/l	---					
Methyl bromide	74-83-9	ND	2.0	ug/l	---					
Methyl chloride	74-87-3	ND	1.0	ug/l	---					
Methyl cyclohexane	108-87-2	ND	5.0	ug/l	---					
Methyl ethyl ketone	78-93-3	ND	10	ug/l	---					
Methyl isobutyl ketone	108-10-1	ND	5.0	ug/l	---					
Methyl tert-butyl ether	1634-04-4	ND	1.0	ug/l	---					
Methylene chloride	75-09-2	ND	2.0	ug/l	---					
o-Dichlorobenzene	95-50-1	ND	1.0	ug/l	---					
Styrene	100-42-5	ND	1.0	ug/l	---					
Tetrachloroethene	127-18-4	ND	1.0	ug/l	---					
Toluene	108-88-3	ND	1.0	ug/l	---					
Total Alkanes - TIC	TIC20	0	0	ug/l	NJ					
trans-1,2-Dichloroethene	156-60-5	ND	1.0	ug/l	---					
trans-1,3-Dichloropropene	10061-02-6	ND	1.0	ug/l	---					
Trichloroethylene	79-01-6	ND	1.0	ug/l	---					
Trichlorofluoromethane	75-69-4	ND	2.0	ug/l	---					
Vinyl chloride	75-01-4	ND	1.0	ug/l	---					
Vinyldene chloride	75-35-4	ND	1.0	ug/l	---					
Volatile organic compounds - TIC	E-12419	0	0	ug/l	NJ					
Xylene, total	1330-20-7	ND	1.0	ug/l	---					